The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1395.—Vol. XXXII. LONDON, SATURDAY, MAY 17, 1862. (WITH SUPPLEMENT) {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE

Original Correspondence.

ROLLING IRON—ARMOUR PLATES.

SIR,—I perceive, by the Journal of May 3, that Mr. Napier, of Glasgow, proposes rolling iron by placing a series of rolls one before the other, with vertical rolls where required. I beg to state that I took out a patent for a similar process in Feb., 1861 (specification 333), and that the same is now in course of erection at the Dowlais Ironworks, Glamorganshire, for blooming for railway iron. Slabs for the heads of rails can be rolled from a bulky pile down to any required thickness without any labour at the rolls. The pile is thrown into the first groove, and passes through the whole of the rolls. The rolls are short, having but one groove in each; it is, in fact, a self-acting mill. Besides, the layers of iron must be more properly welded, as they pass through the rolls much quicker than by the old system. The labour saved by it will pay for its erection in eight or nine months where the make is large. One machine will bloom for two or more mills if required; and rails can be rolled from very large piles, without the re-heating, by placing a sufficient number of rolls to reduce them small enough to enter the finishing rolls. Engineers, at first sight of the working model, think there is a difficulty in getting the rolls to go at the proper speed to suit the elongation of the iron. Mr. Napier, according to his specification (for provisional protection only), seems to think so. As far as the railway iron is concerned, or, indeed, any other iron, unless it be very wide plates, of which I shall speak hereafter, there is no difficulty whatever, of which I think I shall convince anyone practically acquainted with the rolling of iron. The rolls, of course, may be made larger if required, to make up for speed. We will suppose the body of all the rolls to be the same size, and driven at the same speed; then as the grooves decrease in size the diameter will increase in the working part, which, I think, quite sufficient for the elongation. But if it should not be so, it is quite immaterial, which the following will prove. Place any obstacle before the groove in the rolls (say the side of the roughing plate, for instance), and it will stop the pile, or bloom, as soon as it comes in contact with it, yet the engine will continue the same speed. Remove the obstacle and the pile passes through, and, if not stopped too long so as to cool, it will still make a good rail. Again, if the draft is to severe, or the roll to smooth, the bloom will travel through the rolls slowly, when the rolls are going full speed, and yet make a good rail, thus showing that very little indeed will cause the rolls to slip over the iron, if required, without injuring it. A great deal more may be said on the subject, but the above must suffice at present; therefore, I have no hesitation in saying that rails made with my patent mill will be superior to those made on the old system, being more properly welded; and this I say after having a number of years' experience and close study in some of the largest ironworks in the country.

A few words about Armour Plates and I have done. As armour plates are much in demand, and their weight continually increasing, so much so that it is with difficulty they are handled by the men, I believe they can be rolled any size easily and economically with my mill, by placing a pair of vertical rolls between each pair of horizontal rolls. The vertical rolls will draw them to the width required, either square at the edges or tapered, and at the same time convey the plate into the next pair of horizontal rolls, and thereby do away with the enormous expense of bringing the edges parallel. Besides, such a mill would ensure good edges, free from cracks, &c. There would be no men required with it after it entered the first pair of rolls until completed. CHARLES WHILE.

Taff Vale Rail Works, near Pontypridd, May 7.

PRESENT STATE OF THE MANUFACTURE OF RAILS.

SIR,—A paper I addressed some months ago to the Journal, on the subject of rails, called forth, soon after its appearance, a communication from a correspondent signing "T.," who used the heading of my article as a text to some strictures on the same subject. Though my name was used, and my paper mentioned in this communication, it was not in a manner that rendered any reply on my part necessary; but on recently looking over "T.'s" remarks, they appeared to me more suggestive than I had at first supposed, and gave rise in my mind to a few reflections, which, with your permission, I will proceed to lay before your readers. In the first place, "T." says that "the more an Englishman sees of foreign nations, the more will he become strengthened in the opinion that his own country can lay the most legitimate claim to pre-eminence in the manufacture of iron." Foreign nations, in regard to rails at least, seem to have arrived at a different conclusion; and viewing the subject alternately from "T.'s" point of view and that of foreign engineers, it is not difficult to see how these two conflicting opinions may be both perfectly reasonable. "T.," justly proud of the vast resources of Great Britain in men and materials, looks to what she *can* do, foreigners to what she *does* do; and while the rage continues for the production of cheap rails, of no matter how inferior a quality, so long will a low opinion of English rails exist on the Continent. As to the policy of some railway magnates towards their purveyors of material, I consider it not only all wrong, but so absurdly and transparently so, that it seems incredible such a course should be persisted in, particularly when unprejudiced professional opinion is so unanimous in condemning it. It seems to me that there are but two rational systems to be pursued in the premises: one is, to specify minutely the materials and manner of and in which the rail is to be made, to take measures to ensure that the stipulations be carried into execution, and then, *exact no test or guarantee;* or, simply to agree that the rail, when finished, shall possess certain qualities and sustain certain tests, taking, if this be thought insufficient, a guarantee for one or more years, and then leave all the details of manufacture entirely to the discretion of the furnisher. Either of these methods would be logical, but the second is not only logical, but also the plain, common-sense mode of obtaining a given required result. If this result be obtained, it can make but little difference to the company whether the rail is made of cast-steel or bee's-wax. The lack of wisdom in dictating the choice of materials and mode of manufacture is very evident, from the consideration of a few facts: —1. Different forges frequently work up totally different descriptions of raw material, consequently, to obtain the same result, a good rail, different processes must be resorted to.—2. The rules for working are frequently prescribed by men comparatively ignorant of iron manufacture, and who, therefore, insist, with a pertinacity directly proportionate to their want of knowledge on the subject, on the use of certain methods which they *think* will produce the desired end, perfectly convinced that the ironmasters either cannot or will not make a good rail, unless told how.—3. The difficulty of exercising so strict and intelligent a supervision as will ensure the prescriptions being adhered to, *if the manufacturer be disposed to break through them.* In substantiation of this fact, I may remark that a gentleman, in speaking of a large continental ironwork with which he was connected, told me that, as the comptrollers which the railroad companies sent were only civil engineers, there was no difficulty in arranging matters according to their own ideas. Certainly every branch of trade presents temptations enough for trickery, without the intervention of a policy which induces men who may have the will, though not the courage, to be honest to take advantage of the ignorance of their customers to break their contracts in the letter, if not in the spirit. There is another reason why the furnisher should be allowed to work in his own way, but which, as it is of a more general nature, and touching rather public than private weal, may be considered as resting on too transcendental a basis to be worthy the consideration of practical men. It is this—*that by tying down intelligent men to fixed rules, the genius of the country is prevented from developing itself in the discovery of new methods, or the perfection of those already in use.*

As regards the continental methods of manufacture, it is not a little interesting to notice the different courses pursued in different countries. Generally throughout Germany, as will be seen by reference to my former article, the greatest possible attention is paid to the composition of the packet. The plates destined to form the head and flange of the rail are rolled from separate packets; the nature of the strains which the head, flange, and rib, are severally to sustain are carefully ascertained, and that description of iron best calculated to resist such strains placed in those parts. Theoretically this system is correct, but in practice a difficulty presents itself which, unless the greatest precautions be taken in working up the rail, will neutralise all its advantages. I allude to the *probable imperfect welding of the packet*, when composed of two, three, or even four different natures of iron, each having, perhaps, a different welding point. What is the advantage of having the head of the rail formed of such a superior quality of iron as to nearly approach the character of steel if it be liable, from inevitably imperfect workmanship, to split off entirely, and leave the rail completely decapitated? Nor is this merely a hypothetical contingency—on the contrary, it is one that has frequently occurred—for example, the Rhenish line, of which I speak in my previous paper, after procuring rails of a good theoretical composition, had the mortification of seeing the heads after three or four years of service, dissolve partnership with the rib under the pressure of the wheels, or else chip off at the corners; in fact, the tendency of the grinding crush of the driving-wheels of a locomotive is as much to burst open the welds as to use down the rail by regular wear; and care should be taken in endeavouring to counteract one cause of deterioration, not to aggravate another equally, if not more, menacing; all this from a technical point of view, and without touching on the subject of increased cost. It appears to be owing to the greater necessity of well working up a packet composed of so many different natures of iron that in Germany the thorough use of the hammer is so strongly insisted upon. In France and Belgium the effort seems rather to be directed towards increasing the homogeneity of the packet, and the suppression, or rather non-introduction, of the preliminary treatment by the hammer. In the example I give of Belgian rolling-works it will be seen that nothing (almost) is used but raw puddle-iron, and the packets are taken direct from the welding furnace and rolled. In France this system has also many advocates; and M. Charles Lan, one of the most enterprising and intelligent French metallurgists, gives in his adhesion to it in one of the *livraisons* of the fourth volume (1859) of the "Bulletin de la Société de l'Industrie Minérale," where he says:—

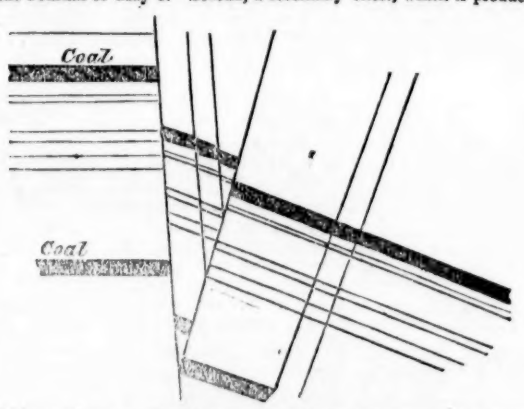
"In France even this process has been employed; we know of one forge in the centre where the experiment, tried on 500 double T rails, fully succeeded. The top and bottom plates of merchant iron were suppressed, and the packets composed exclusively of puddle-iron, granular for the running faces and fibrous for the rib. As these packets were made considerably *wider* than *high*, in order that in bringing them down to the square form they might be powerfully compressed on the edges, the shape of the roughing grooves had to be somewhat modified, but with this exception the operations were all conducted with the ordinary stock of the works. At the receiving depôt no more rails were refused on account of cracks, than when the covers of merchant iron were used (about 4 per cent. in either case), moreover, no case was observed of the weld's opening. The rails, placed upon supports 1·20 metres apart, supported a pressure of 28,000 kilos. (over 61·600 lbs.) before breaking, and the break perfectly homogeneous, presented a handsome grain, which many ironmasters would have styled that of puddled steel."

I hope these few remarks may to some extent stimulate investigation among competent men into this most important subject. My own belief is, that as no branch of industry can permanently retrograde, the day must arrive when such improvements in the manufacture of steel will take place as will render the production of *cast-steel rails* possible, which, with the introduction of metallic sleepers, some improvements in the join (one of which certainly is placing it *between* two sleepers, a system now introduced in some parts of Germany), and I may add, the use of cast-steel wheels (already much in use in Germany) or, at least, tyres, as made at the Firminy Steelworks in France, will render this department of railway engineering as nearly perfect as our present ideas on the subject permit us reasonably to look for.—*Heidelberg.* E. SHERMAN GOULD, C.E.

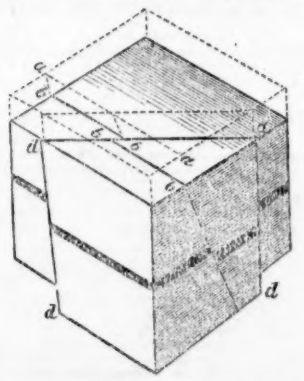
ON THE HEAVES AND THROWS OF LODES.

SIR,—I have read with great pleasure Mr. Ennor's letters in the Journal during the last few weeks on the heaves or throws of lodes; and if they do no other good than to awaken a spirit of enquiry in some minds, and give a direction to that spirit in others, he deserves the thanks of the mining community for the manner in which he has brought this, to the miner, highly important subject before them. I have, however, felt more than a common-place interest in reading those letters, because that during the time I had the honour of occupying the position of teacher of practical mining in the late Truro Mining School, I based my lectures on this subject on the theory that lodes or veins were once continuous; that some veins were formed prior to others; that the more recently-formed vein intersected the one of prior formation, and, presuming a movement to have taken place between the segments thus formed, that the progress of those segments must of necessity be towards the points of the wedge-like pieces that are called into existence; and it is gratifying to find that the principles which I then adopted are so fully confirmed by a gentleman possessing such extensive practical experience as Mr. Ennor. That gentleman has not, however, sufficiently extended his remarks, having confined them to the effect produced on beds or veins in the direction of the motion imparted to the masses containing them, and consequently this theory is more open to objection than I consider it might otherwise be, since under certain conditions the most complicated effects may be produced by a single movement in one direction.

The effects produced on beds or veins contained in masses, separated from one another, and to which motion has been imparted, are of two kinds. First, a direct effect, showing a displacement in the direction of the movement. This is very apparent in all stratified rocks, and I think I cannot give a better illustration of this direct effect than is afforded by plate 28, in Mr. Greenwell's work, referred to by Mr. Tregay, in opposition to Mr. Ennor's views; but which, your readers must see at a glance, on the contrary abundantly confirms them. Mr. Ennor has also given some diagrams in which this effect is well illustrated, particularly No. 3, in the Journal of May 3. Second, a secondary effect, which is produced



on beds or veins traversing the masses which are displaced, and having a direction and inclination forming an angle with the line of motion, and I think this effect may be illustrated by the accompanying diagram, in which



the dotted line *a a* represents a lode or dyke in its original position, and the lines *b, b, b, b* the same, after the portion *d, d, d, d* has been depressed, and the whole reduced to a level. In this diagram the lode *b, b, b, b* is evidently thrown to the right, being a secondary effect, and it is equally evident that is occasioned by the downthrow of the portion *d d*, as seen by the positions of the black line representing a coal seam, the throw of which is produced by the direct effect of the movement.

In this secondary effect the direction of the heave depends on the inclination of the lode. In the example given, had the inclination been in the opposite direction the heave would have been towards the left hand, and I have little doubt that Mr. Tregay's diagram, No. 2, can be fully explained on this principle, when all the facts respecting it are known. We must not expect to solve one of Nature's most abstruse problems from imperfect data. I would not assert, however, that every example can be explained on the principle in question. Nature is not confined to one mode of action; still I believe that a greater number of heaves can be explained by the supposition of a movement of portions of the earth subsequent to the formation of such veins than by any other theory, besides which simplicity of this theory renders it easy of application, and, therefore highly important to the practical miner. W. RICHARDS.

Academy, 4 Myrtle-street, Liverpool.

LIFE IN COAL, &c.

SIR,—Now the subject of the origin of coal is mooted, can any question be more appropriate than what Mr. G. F. Goble starts? For if [illegible] creatures were ever discovered embedded in stone, as some people [illegible] surely it would not occupy much mental research to verify the [illegible] no doubt, some who read this Journal would, probably, testify to the [illegible] (if any ever did occur) of reptiles being found alive in solid coal or other [illegible] stances. Only one single proof of such matter would do far more to [illegible] the world that coal could not have been originally formed from [illegible] the Plutinist imagines; or from sea-weeds, or any of the other [illegible] vague hypotheses. Unless life can remain in certain places hermetically sealed, or ceiled, far beyond the ordinary period of *breathing* animation at any rate human reason under its present constitution cannot be made to believe corruptable organisation can exist entire amidst such solid matter, can undergo *carbonisation*, and yet leave vivifaction intact for ages [illegible] Nevertheless, if healthy animals can get suddenly incased while in a state of natural stupor out of reach of light, motion, and atmosperic influences, [illegible] can they die till they again *attempt* to breathe? Then it is evident [illegible] lity would cease from re-breathing vitiated gases. Where no [illegible] takes place, no suffocation or death can ensue, unless by compression, being forced to endure heat or cold beyond life's natural powers of endurance—sustenance none partake while in senseless torpidity—which during any probationary hybernation, or a million years after [illegible] tion; because *time* itself would become to such *airless* beings as [illegible] sleep till roused again to renew action, &c.

Could ever human souls and bodies, when in the vigour of health, [illegible] so entranced as to be quietly, quickly, and closely entombed, and [illegible] nially placed where neither air, water, fire, or earth could seriously affect them, such immured would neither die or corrupt. O. M.

GOLD IN WALES.

SIR,—Once more, I have no wish to cross lances with Mr. Evan Hopkins on a subject which he understands much better than I. He [illegible] however, to write in a public journal so that no wrong impression of [illegible] sons may be generated in the minds of readers, some of whom are [illegible] of knowing the facts of the case, and the variety of opinions thereon. [illegible] communication is only intended to explain two or three things:—

That I most certainly have no reason to be enamoured of Berlin's [illegible] but as two of them at Clogau obtain 18 ozs. of gold weekly, from 10 [illegible] of stuff, I see no reason why they may not be allowed to work themselves [illegible] death, provided the tailings are taken care of for treatment in another [illegible]

That I never for an instant put any machinery, whether crushing [illegible] grinding, in comparison with Cornish stamps, on the score of economy in the mere reduction of quartz. This would be simply absurd.

That I am still of opinion that no one process of gold extraction is [illegible] to suit equally well under all circumstances.

That speculation is not likely to run wild in this district, as in 1859, for many reasons; although in the face of the fact that 3 ozs. of gold having been obtained from 700 tons of quartz from Clogau, in a very rough manner, will make people desirous of trying to do so in other places.

That there is a large auriferous area in Merioneth, I *know*—what much of it is of a remunerative character, I do not know; I think it is.

The Cwmhesian Mine may in the course of the year be privately proved by testing the merits of both crushing and amalgamating processes. Gold has certainly been discovered there occasionally very rich, and I am of opinion that 15 dwts. per ton may be taken as an average. If so, [illegible] ing to the experience of Mr. Hopkins and others, it ought to pay well if the ore exists in abundance.—*May* 15. T. A. READWIN.

THE INVENTORS' INSTITUTE.

SIR,—I was glad to read in last week's Journal that the inventors and patentees have bestirred themselves, with the determination to establish and form a really influential Association or Institute. I trust that the movement will be one that will go on, and effect what I and others have heretofore recommended—the concentration of the energies of inventors, so that instead of being a number of disunited, nay, even antagonistic individuals, they may form a compact, united body, and hence become a sufficient power in the State to make the inventors' interest one of those which must obtain the respectful attention of our statesmen and legislators, so as to secure to the inventor the preservation and even improvement of those just rights of property in his productions, which he claims in common with all who labour in matters that the community considers worthy of encouragement, and which have been so recently threatened with annihilation by the heavy artillery of Sir William Armstrong, and the tactics of Mr. Ricardo, as well as by a more invidious opposition going on, which does not propose to sweep away patent rights, but to roughly emasculate them by harrassing inquisitions, forced licenses, and the like. Therefore, notwithstanding the Patent Law Amendment Societies which may be in existence, this Institute is much needed, and I trust, become of great service to the inventors' cause.

May 8. F. W. CAMPIN.

THE PATENT LAW, AND INVENTORS' RIGHTS.

SIR,—Having just had the opportunity of perusing the remarks of your correspondent, Mr. F. Campin, on Patent Law, I have great pleasure in expressing a general concurrence therewith; but, although his reasoning in favour of the continuance of individual property in the exclusive use of inventions for a period sufficient to induce capitalists to incur the expense of working them out in forms of practical utility appears to me quite unanswerable, and his suggestions for the better working of the legal machinery by which patent rights are granted would, if carried out, tend to prevent much of the present waste of time and money, I cannot but think he might—if not restrained by the fear of greater improvements would have little chance of being acceptable—have suggested other amendments of patent law and practice, which, if not desired by the general public, are only not desired because that public do not know its own interest.

The real interest of society is to have the earliest possible use of the greatest number of good inventions, and in every other instance the method adopted to obtain the end is the cheapest and largest supply is to offer sufficient inducement, pecuniary or other, to the producer. Granted patent rights is the inducement offered to the publication and perfecting of inventions, and in our present social state a better inducement may be impossible; but does seem strange that this inducement should be accompanied with a condition—payment of money—which notoriously prevents a very large proportion of inventors from obtaining protection for their own inventions, thereby defeating the very object of [illegible] fication of inventions—for which patent rights are granted.

In palliation of this folly, it may be stated that it is the general rule of our legislation and that paying for a patent is no worse than paying the fees before your case is heard in court. Perhaps it is no worse for the inventor than for the plaintiff; but in the case the goose termed "plaintiff" does not generally lay such valuable golden eggs as the other goose—ycleept "inventor;" and society suffers less by a creditor being induced to refrain from legally recovering his claim than it does by not obtaining the invention which are kept secret, or taken abroad, for want of the means of paying for patents in England. Mr. Campin suggests that applicants for patents shall be bound to explain [illegible] he does not state what about, but I presume he means the novelty of their supposed invention. I have no very great faith in official administration generally, but in this case perhaps, official might be more efficacious than individual enquiry. There can be no objection to the latter being carried to any extent desired by applicants, but Messrs. Bennett, Woodcroft, and Co. could investigate the novelty of inventions much more easily and efficaciously, they having the means of seeing unpublished provisional specifications, which no one else can. Their report that the alleged invention is not new would, if accompanied by reference to its former publication, extinguish the desire to obtain a patent in most minds; but, as all human tribunals are capable of error, it might be desirable to afford an obstinate inventor—if earth contains such an individual—the power of obtaining his patent notwithstanding such report. It should not be granted to him, with the proviso that, as at present, he shall not recover damages for its infringement, unless he can satisfy the court his invention is novel. Patents [illegible] for inventions, whose novelty Messrs. Bennett, Woodcroft, and Co. have certified, are surely to be held like any other kind of property—*i. e.*, to be assumed to be the property of the possessor, in the absence of sufficient evidence to the contrary.

There is one other improvement which Mr. Campin has not suggested, but which should have been very glad to have been able to quote his authority for—the extension of the time of provisional protection to at least twelve months, and the power, on cause shown, to extend it yet further. Six months, or, rather, a little over four [illegible] is, in many instances, much too short a period to determine if an invention is worth patenting. It is needful, to avoid losing the property in an invention, that experiments be made secretly previous to provisional protection—in many instances at great inconvenience, and in some cases secrecy is almost impossible; so the present system compels the purchase of the patent before the invention can be sufficiently tried to prove its obtainment.

I hope the above suggestions will not be assumed to indicate that diminishing the number of patents is my only object; I am equally confident the more facile procurations of inventions is also greatly required; but I can see no ready way to this [illegible] out, at least, partially removing the pecuniary obstacle to the obtainment of protection; were this granted gratis, and its period extended, less social injury would result from requiring the inventor to pay for his patent. An invention which has endured a twelvemonth's experimental probation, may be assumed to be worth the investing the cost of a patent, in addition to the previous experimental expenses, and the injustice of requiring the creator of this addition to the world's wealth to pay for its protection (over and above paying his share of general taxation), would,

to induce him to conceal the result of his mental labour, or, as too often occurs, to a foreign state, where laws are, in this matter, less unjust than ours.

ALFRED SAVAGE.

chop, May 14.

LONDON AGENCIES, AND CORNISH MINES.

—A few weeks ago, I observed several letters, as well as remarks of your own, on the subject of having London Agencies for Cornish Mines. I was much struck with the determination of the pursers, agents, and others in Cornwall, to prevent these desirable and even necessary arrangements being carried out; and in cases where have been adopted by the shareholders, I am surprised to see the systematic man- which the officials at the mines set at defiance the deliberate wishes and resolu- of general meetings in this respect. I am told that the arrangement is not con- to the local speculators, who wish to enjoy all the privileges and advantages the earliest, if not exclusive, information places at their disposal; and it is said before improvements in mines are known in London, and to the out-adven- telegrams are sent off to buy shares, which, probably, in many cases are obtained the wearied holders, whose money had assisted in making the discoveries, and who of their shares, totally ignorant of the facts known to a select few on the spot. If the telegrams were sent to an appointed office, and reports dispatched by the post to the same place, the shareholders could readily learn the information, would, also, be at once published for the general benefit. Where I find so reason- arrangement opposed by the agents and local shareholders, or dealers, I look the greatest suspicion on the motives of these objectors. It must be clear to any- it arises from a desire to keep the frequent changes in a mine from being readily beyond a certain limited circle. I hope all those who are really interested in legitimate mining, and in protecting the *bona fide* shareholders, will take up and enforce its adoption and practice, even at the risk of having to find other who will obey instructions, and perform the duties entrusted to them.

JUSTITIA.

ington, May 12.

ACTICAL MINING—NEGLECTFUL MANAGEMENT.

—A most serious accident occurred at the Powtan Iron Mine, Wadebridge, on night, whereby four poor fellows were instantly killed, under very distressing stances. They were engaged in "stoping" the iron lode, which, as I learn, is a most unminer-like manner. The lode is take away, and but little or no timber in, through the miners have to go up against the lode to work on stages. Now, miner knows the liability of hanging iron lodes to fall away at a moment's notice, to the numerous joints and floors, and, therefore, the greatest care should be taken, as the work can be performed in a safer and more economical manner. Just poor men were about to ascend the ladder the lode gave way, and falling upon killed them instantly.

do they not work the Powtan like other iron mines?—put in a stull, or level, strong timber under the lode, or drive a side level, and as the lode is taken away with rubbish. If the men were allowed timber for pass-props, sets, &c., they at least have a chance of their lives. The Government Inspectors of Coal Mines tinually complaining of the number of deaths caused by neglect to set props and and I hope the Royal Commission for Metalliferous Mines will look well into the At Powtan Mine, I have seen men at the timber-house door begging for timber, ying that they were in danger of being killed without it, but they have been way without any. There should be a practical man to inspect all timber-ground Were such a man appointed, and allowed timber enough, many valuable lives be saved.—*Roche, May* 16.

A TIMBER MINER.

PENGENNA MINE.

—Seeing that "A Shareholder" asked Mr. Ennor as to the result of Pengenna in answer I have only to say that Mr. Ennor gave up the management of the mine he left for Spain. We have been driving on the deep adit to get under the pro- lode found east of the cross lode, and have sunk a new shaft from surface. We getting in under the promising lode where Mr. Ennor expected to find ore, and happy to say that we have now a lode in the adit end worth 1 ton of lead per fm. tter lode a man cannot see in any mine. This mine has raised thousands of tons and nothing is yet done under the adit. The adit end is all in maiden ground.

EMANUEL HITCHENS.

WHEAL LUDCOTT AND ITS MANAGEMENT—THE OUT-ADVENTURERS AND THE PUBLIC.

—The City Article in last week's Journal reflects with undue severity on the ma- nt of this mine, in not giving sufficient and timely information to shareholders e public generally. The presumption on which this allegation is founded is that ine has become suddenly rich. But, briefly, what is the history of the concern? years and nine months ago we commenced making profits, and paying dividends to tent of 1000*l*. and upwards quarterly, and have continued, with but one exception, undeviating regularity at that rate to the present time. The exceptional quarter ufficiently and satisfactorily accounted for by a series of very serious accidents to ine and its machinery. What has been the price of the shares during this period? aximum price 4*l*. 5*s*., and the minimum price 40*s*., and at the latter price they een sold within the present year. But has there been no official information sup- to shareholders and the public regarding the state and prospects of the mine during riod referred to? Have not the meetings been regularly held every quarter, and tract of the accounts, accompanied with a full and explicit report of the mine, pub- and sent with business regularity to every shareholder, and also to the Journal for formation of the general public, on every occasion? And have not these reports orne out by actual results, and numberless misgivings removed from the minds of t and doubting shareholders (produced in a number of instances by the ill-advised vention of market men), who have applied to me for more intimate information is ever expected to be conveyed in general reports? Perhaps some of the out ad- rers will respond with spontaneous instinctiveness in the affirmative, and confess andour that this sin cannot be laid to my door. I have always spoken and written nsophisticated plainness in regard to the state and prospects of this mine, and if have differed from me in the matter I am not to be taxed with the consequences. refrain from being personal on the present occasion, and content myself with re- ng that if further explanations and appeals are necessary, I have the materials at gers' ends to arraign and convict some of the erring parties, who assume with too confidence to be guides of the blind. Probably the sum of the difference between and me is the rock upon which many have split.

ROBERT KNAPP.

al Ludcott.

SOUTH CARADON WHEAL HOOPER MINE.

—If your correspondent, "Honestas," had been a shareholder in South Caradon Hooper he would have learnt, had he attended the last meeting, that steps were d to be taken to recover the calls in arrear, which are not so heavy in reality as ppear in the accounts. For, in the first place, some were paid at the meeting after counts had been made out, and others are owing by local shareholders, who are editors under the head of "liabilities" for more than the amount of calls they owe. rence to forfeiture of shares, the company was originally formed in Cornwall, and e for the forfeiture of shares was entered in the cost-book, so that proceedings for covery of calls in arrear must be taken in the Stannaries Court.

J. Y. W.

RIBDEN MINE AND ITS MANAGEMENT.

—I am a large shareholder in this mine, and, like many others, I was anxious to hat some portion of the hundreds of tons of ore had been got to surface that Capt. ds and Mr. Hanmer stated in their reports of April 9 and 16 to have been already ered in the back of the 70 fathom level, west of Gilbert's shaft, and I attended a g of the shareholders, held yesterday at the White Hart Hotel, Uttoxeter, for that e, but I regret to say that I was much disappointed when told by Mr. Niness that ld not get anything like that quantity from the ground in the back of the 70, re- to by Capt. Richards and Mr. Hanmer, and that he had resigned the management mine, and insisted on Capt. Richards and Mr. Hanmer to come and bear out their ports by getting the ore they say is there quite ready for taking away, and at ake the profits they speak of, as he himself was one of the largest shareholders, uld be only too glad to participate in them. The question was then put by the an (Mr. Thomas Cullen) to Capt. Richards, if he would take the management, he offered to do at 12 guineas per month and the *usual perquisites*, for two years; Chairman thought, as Mr. Niness had stoped 12 fms. within the last fortnight same ground, that a much shorter period would test the validity of his report; t if Capt. Richards had any confidence in his own report, the better way would him to get the rich pipes of ore he alludes to on tribute, but this he refused, although offered all the money the ore would realise, by merely paying the cost of get- and the royalty, which is 1-15th only; but all the rich ore he refers to had rms for him equal to the 12 guineas per month and the usual perquisites. For ther information of the shareholders and the public generally I could also wish insert the different reports herewith enclosed, but of course your space is too s. I must also state that Mr. Niness was solicited to continue his services as er, and that the directors and shareholders passed an unanimous vote of confidence management.

H. T.

THE TREWARMET DELABOLE SLATE QUARRIES.

—The letter of your correspondent, "E. H.," of April 26, wherein he clearly in- es that 100,000*l*. have been spent on these quarries without return, is but lamely ted by his letter of this week, explaining that he meant to refer to some worthless s in the district, and not to the above undertaking. Our time, however, is too e to be spent in further noticing the errors or misstatements of an anonymous we strongly suspect, an interested writer. "E. H." need not trouble himself the public, whose protector he constitutes himself. That sagacious body has y testified, by their subscriptions, their confidence in the undertaking, and we not, will further do so when we bring the company fairly before them, which we do immediately. As to himself, if he proposes to embark his own capital (his ld reason for seeking discussion and giving information), we can only say that if l favour us with a call, we will try and satisfy him as to the value of the Trewarmet Quarries as an investment for his money. Anonymous correspondents, however, ly decline to show themselves, and, therefore, we confess we do not much expect anything of Mr. "E. H." In conclusion, we must inform him that we shall cer- not notice any further or other anonymous letters on the subject.

CARRITT AND SON.

Basinghall-street.

LD MINING IN WALES—*(from a Correspondent)*.—At the Clogau on Saturday last, an important discovery was made in driving the lower cross- —the bunch of visible gold worked in the 5 fathom level being cut very rich. interested in the undertaking look upon the discovery as of a value which cannot mated by the intrinsic worth of the deposit laid open, and as proving the inac- y of the opinion expressed by Mr. Evan Hopkins, that the auriferous mineral was a few square fms. in extent at surface, and did not extend in depth beyond a few feet. deepest part of the Clogau Mine is now 46 yards, and it is there found to be as at the surface.

PIC-NIC AT THE BOTTOM OF BOTALLACK MINE.—A party of gentle- composed of Messrs. S. H. James, jun., Richard Thomas, A. Chenhalls, N. Holman, John Holman, F. Holman, with Capts. John Rowe and John Boyns—on Monday nded through the new diagonal shaft to the 190 fathom level. They were taken expeditiously and safely, in three parties, by the wagon, and soon proceeded to dis- a very substantial dinner, at which Her Majesty's health, the purser's (Mr. S. H.), the engineers of the shaft (Capts. John Rowe and Henry Boyns), were drunk, proper eclat. After breaking for themselves some specimens of copper ore, they ted the 180 and 165 fm. levels, where so much riches were formerly discovered, satisfied with fatigue and sight-seeing, returned again to the surface, instructed and ted by the trip. The diagonal shaft, which serves the double purpose of a man- and shaft, is one of the greatest undertakings ever attempted by mining enter- in the West. It is nearly 400 fathoms long, and, dipping at an angle of 42°, passes gh the most productive parts of the Crown's lode. Its future value to the mine can scarcely be over-estimated; and too much credit cannot be given to Capts. Rowe and Boyns for successfully overcoming the very formidable obstacles against which they had to contend—superintended as they were by the judgment and energy of the purser.

ROCKS AND MINERALS—MINES AND MINING—No. VII.

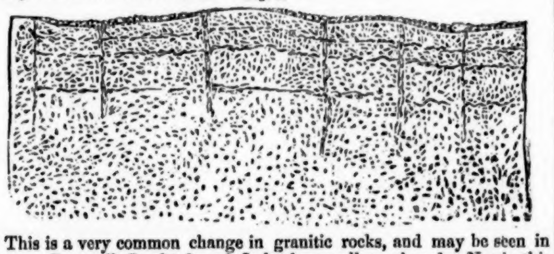
BY EVAN HOPKINS, C.E., F.G.S.

ON THE JOINTY AND LAMINATED STRUCTURE OF THE PRIMARY ROCKS.

My late friend, Mr. Greenough (the first President of the Geological Society), in his "Geological Essays," written about 44 years ago, observed that "the word *stratum* is so familiar to our ears that it requires some degree of manliness to acknowledge ourselves ignorant of its meaning, and easy as it may seem to determine whether a given mass of rock be or be not stratified, there is, perhaps, in the whole range of geological investigations no subject more pregnant with controversy." Though so many years have passed away since these observations were made, and though during this period the science has made rapid progress, and though since I have been a member of the Geological Society (now nearly 20 years) I have taken every opportunity to agitate the question, and to point out the distinction which exists between the laminated bands of the primary series and beds of deposits, yet the word *stratum* is improperly used in connection with crystalline rocks to this day, to the very great detriment of practical geology as applied to mining.

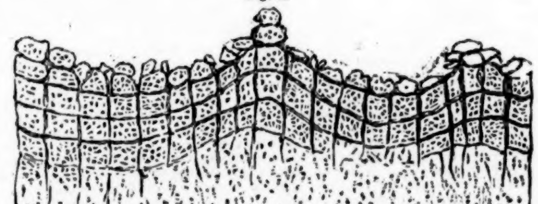
In describing the fossiliferous rocks, or real beds of deposits, whether they contain organic remains or not, the term *stratum* is correct, however confused the planes of divisions may be. The word stratification implies a cause as well as a mode of form or deposition, and that cause is assumed or proved to consist in a *mechanical* deposition from water. Crystallisation from water will produce vertical and oblique lamellar plates in the masses derived therefrom, and oxidation and decomposition of surfaces, and various aggregations and precipitations, will display exfoliations and radial and mammilated subdivisions; yet none of these structures should be called stratified, according to the original definition of that term—*i.e.*, beds resulting simply from successive *mechanical depositions*. If geologists continue to use the term stratum in the same indefinite manner as they have hitherto done in describing the primary as well as the sedimentary rocks, we need not be surprised to find miners and others making use of the word stratum in connection with granite without any definite meaning. We have read reports in which it is stated that the stratum is granite! I thought it necessary to make the foregoing observations before proceeding further, inasmuch as it is essential that the reader should correctly comprehend what are the distinctions which are observed between semi-crystalline bands of primary rocks and beds of rocks resulting from mechanical depositions. The granitic and the primary slates belong to the same fundamental formation, the latter being merely a semi-crystalline transition from the granitic base. The annexed section (Fig. 3) represents a mass of granite, indicating a change near the surface from a compact granular texture into the flat and undulating lamellar structure, and divided by vertical joints into distinct blocks.

Fig. 3.



This is a very common change in granitic rocks, and may be seen in Devon, Cornwall, Scotland, and Ireland, as well as abroad. Nor is this lamellar structure confined to granitic quarries; porphyritic and greenstone rocks exhibit the same kind of subdivisions, flat or curved, either horizontal or slightly inclined, resembling so much the character of stratification, that had it not been for the vertical planes by which they are often intersected even an experienced eye would at a distance be deceived by them. The subdivision of the granitic masses by joints or planes of cleavage are seen as perfect as in the real sedimentary beds, but on close examination we find that this structural appearance proceeds from the same cause as that which produces the divisional planes of the crystals of felspar, carbonate of lime, &c. It results from a semi-crystallisation, which has a tendency to produce geometrical forms in the aggregated masses as well as in the single crystals. The same power that forms the prism of quartz is also capable of forming a basaltic column. The geometrical forms vary according to the composition of the masses. The following section (Fig. 4) shows the granitic changes further developed. The entire surface being converted into rhomboidal blocks of granite, many of which become darker and more compact than the parent rock below.

Fig. 4.



In the "Report on the Geology of Cornwall and Devon," by Sir H. T. de la Beche, we find the following remarks, in page 163:—

"A very general structure prevails throughout these granites, and is more particularly observable in the larger masses. This structure consists in a division of the granite into portions resembling beds, which form tabular sheets of matter in the central parts of the masses, where they are extensive, the edges bend beneath the adjoining schistose rocks, and conform to the surface of the junction between them. The whole, therefore, has the general character of a stratified mass."—"This tendency to be divided or cleave in a stratiform manner is highly deceptive, and has probably given rise to the opinion so frequently expressed at one time that granite was stratified."—"There are few ravines or coast sections of the granite at its junction with the slate, through which it has been protruded, in which this tendency to divide into statiform bodies is not observable." —"It is the intersection of the more or less perpendicular joints or divisional planes with this stratiform structure in the Cornish and Devon granite which gives it the appearance of being composed of multitudes of rectangular blocks, block being piled upon block, so that in good exposers, as on the sea coast of the Land's End district, the cliffs seem almost artificial."

It has been already stated that the constituent ingredients of the granitic masses not only arrange themselves to form the granular compounds, but also continue restless whilst they are surrounded with moisture, and remain *in situ*, to modify the structure by divisional joints, slaty cleavages, &c., especially on the outskirts. In rocks, as in crystals, the integrant particles are combined and arranged into forms more or less geometrical; if the rocks do not exhibit such symmetrical figures as perfect crystals, such as the six-sided prisms of quartz, the oblique rhomboid of carbonate of lime, the cubes of fluor-spar, &c., it may be accounted for by their more complicated composition, so that their forms are not the simple result of the aggregation of similar particles, but the balance of different powers, each tending to produce a different form.

BOTANICAL TECHNICALITIES.—Though few sciences are more generally interesting than geology and botany, the necessarily large number of technicalities introduced into all treatises upon them has frequently deterred many from attaining anything like success. It cannot be denied that during our earlier studies in either science we require continually reminding of the exact import of the various technicalities met with, and hence it is that, unless the student is fortunate enough to have an experienced tutor constantly at his elbow to prompt him, his progress must necessarily be tedious and unsatisfactory. The best and most reliable substitute is, no doubt, a compendious glossary of the technicalities connected with the science he is studying—a glossary that he can rely upon, and instantly comprehend. With regard to the science of geology, Mr. Page's "Handbook of Geological Terms" is really invaluable, and Mr. M. C. Cooke, of the Twickenham Economic Museum, has now given us "A Manual of Botanic Terms," which is equally useful to the student in botany. In a small volume comprising only 90 pages of letter-press, and illustrated with two dozen plates, Mr. Cooke has given a complete glossary of all the technicalities of the science in present use, and we do not hesitate to say that by the careful use of the book a sound knowledge of the theoretical portion of botany may be obtained without tedious labour from any standard work upon the subject.

THAMES TUNNEL COMPANY.—Receipts for the week ending May 10, 55*l*. 19*s*. 11*d*.; number of passengers, 13,439.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending May 11 was 12,565*l*. 2*s*. 11*d*.

Meetings of Mining Companies.

THE DEVONSHIRE GREAT CONSOLIDATED COPPER MINING COMPANY.

The eighteenth annual general meeting of shareholders was held at the office, Gresham House, Old Broad-street, on Thursday,—Mr. W. A. THOMAS in the chair.

After the usual preliminaries, the following report of the directors was read:—

The directors, in submitting the eighteenth annual balance-sheet to the shareholders of the Devonshire Great Consolidated Copper Mining Company, have few comments to make upon the various items of the account.

It will be perceived that the number of tons of ore sold is less by nearly 978 tons than last year, realising a corresponding diminished amount of money. This has not arisen from any failure in the productiveness of the levels, but from the reduction of the samplings during a decline in the standard—a prudential arrangement, alike advantageous to the smelters as to the company, inasmuch as the "ticketings" are thus relieved from an over-supply of ore at a time when it is not absolutely wanted by the smelters.

The average quality of the ore shows a scarcely appreciable difference, being about 1-32 per cent.; and the average price obtained for the metal in the ore is only 3*s*. 6*d*. per ton less than last year.

There has been no extraordinary item of expenditure since the last annual meeting. The mines' cost, if calculated with reference to the whole of the expenses incurred, shows a diminution upon each ton sold of about 3*s*. 11¼*d*. per ton. This, however, should not be relied on as a permanent reduction, arising, probably, from accidental circumstances. The timber imported is an increase, as anticipated, the gradual consumpton of the stock in hand requiring constant additions. In the year ensuing the importation may possibly be in excess of the past year, as also the purchase of iron. All the other items are but repetitions of each annual statement.

The dividends, the real test of profit, are 3*l*. per share less, which amount is about an equivalent to the value of the diminished quantity of ore sampled.

The balance of money in hand is greater, being 18,963*l*. 7*s*. 5*d*., as against 17,258*l*. 7*s*. 9*d*. last account.

The valuation of the property and assets of the company amounts to 98,626*l*. 11*s*. 6*d*. and the estimated value of the available ore in the mines, which, calculated at 5*l*. per ton, the average price of actual sales, amounts to 328,900*l*., making together 427,526*l*. 11*s*. 6*d*., showing resources of which few mines can boast.

It has been the aim and endeavour of the directors, in the management of this valuable concern, to give it a character of permanency as great as mining property is susceptible of; and, by maintaining a judicious regularity in the two-monthly dividends, to avoid an undue enhancement or depression in its value. The high estimation in which this company is held by the public sufficiently attests the correctness of the system pursued.

In furtherance of the desire annually expressed by the shareholders of assisting the miners to educate their children, the directors have established a school on the mines, which is attended by upwards of 60 children.

Capt. James Richards, the principal agent and manager at the mines, will, as usual, give a detailed report of the present condition and future prospects of the department immediately under his charge.

The present directors beg to offer themselves for re-election, and the auditors are willing to accept office if re-chosen.

INCOME.

Balance from last account		£ 17,258 7 9
Carriage of ore outstanding per last account, since received		89 17 1
Sales of copper ore sampled from Jan. to Dec., 1861, both months inclusive—20,855 tons 6 cwt. 2 qrs., realising with carriage	£103,463 5 2	
Deduct carriage outstanding 1st March, 1862	133 4 10=	103,330 0 4
Mundic sold		718 13 2
Fees on transfer of shares		9 15 0
Interest on money lent		192 15 2
Interest on Exchequer Bills		112 3 11
Landlord's property tax, deducted from dues on ores		322 15 4
Total		£122,034 7 9

EXPENDITURE.

Mines' cost from Feb. to Dec., 1861, both months inclusive		£ 38,385 10 4
Mines' cost for January, 1862		3,209 10 1
Timber imported		2,650 18 6
Iron purchased		313 11 7
Water rent, one year, to September 29, 1861		432 3 9
Tamar fishery, one year, to September 29, 1861		48 0 5
Rates and taxes at Tavistock		1,281 1 4
Income and property tax, three quarters, to Dec. 20, 1861		2,352 15 10
Dues on copper ores sold, from January to December, 1861		8,521 6 3
Educational grant, voted May 14, 1861		100 0 0
Compensation to resident director, one year, to December 31, 1861		600 0 0
Office expenses in London—Salaries, rent of offices, stationery, postages, receipt stamps, printing, &c.		702 2 3
Voted to directors and auditors, May 14, 1861		442 0 0
Dividends paid, 43*l*. per share, on 1024 shares		44,032 0 0
Balance—Cash at the bankers	£ 905 2 3	
Cash and stamps in the office	29 9 11	
Cash at Tavistock	200 0 0	
Money at interest on call	9,577 12 7	
Bills receivable	8,251 2 8=	18,963 7 5
Total		£122,034 7 9

CAPITAL AND LIABILITIES.

Shareholders' capital, 1024 shares at £1 per share		£ 1,024 0 0
Mines' cost for February, 1862, including merchants' bills		3,573 19 1
Dues on copper ore and mundic sold, viz.:—		
January 23, 1862	£663 5 3	
February 20	650 19 6	
March 20	798 16 5=	2,113 1 2
Income tax, poor rate, and other taxes, one quarter, to March 20, 1862		1,006 17 8
Water rent and fishery, two quarters, to March 25, 1862		240 17 6
Salaries and rent of office		325 0 0
Balance carried down		98,626 11 6
Total		£106,910 6 11

PROPERTY AND ASSETS.

	Surface.	Underground.	
Wheal Maria	£ 6,720 16 3	£ 232 0 0=	£ 6,952 16 3
Wheal Fanny	1,091 14 11	302 0 0=	1,393 14 11
Wheal Anna Maria	8,213 5 6	2,877 0 0=	11,120 5 6
Wheal Josiah	13,024 11 0	2,765 10 0=	15,790 1 0
Wheal Emma	4,635 2 2	1,903 10 0=	6,538 12 2
Wheal Thomas	246 14 0	245 6 0=	492 0 0
South Lode	773 10 0	155 16 0=	929 6 0
Wheal Frementor			4 0 0
Railway			7,402 0 0
Total			£ 50,622 15 10

In store at the mines—		
Iron, steel, brass, coal, powder, rope, nails, copper, candles, oil, &c.		4,452 11 0
Timber at Morwellham, 137 loads		274 0 0
Copper ores raised in January, and sold Feb. 20, 1862	£8,063 4 6	
Mundic sold	86 18 5	
Copper ores raised in February, sold March 20, 1862	9,798 1 1	
Mundic sold	115 12 6=	£ 18,063 16 6
Ores and halvans at surface, less dues		5,666 3 10
House at Abbotsfield, near Tavistock		3,500 0 0
Office furniture in London		80 0 0
Carriage of ores outstanding, March 1, 1862, per Part 1		133 4 10
Exchequer Bills in hand, £5000—market value March 1, 1862		5,154 7 6
Balance per Part 1		18,963 7 5
Total		£106,910 6 11
Balance brought down		98,626 11 6

Capt. Richards's report on the mines was read *in extenso*, and appeared to give satisfaction to the shareholders. The stock of ore in reserve in the mines amounts to 65,720 tons. Resolutions were passed receiving the report and accounts, re-electing the directors and auditors, and, after voting thanks to the Chairman and directors for their attention to the affairs of the company, the meeting separated.

EAST ROSEWARNE MINING COMPANY.

A general meeting of proprietors was held at the company's offices, Austinfriars, on Thursday, Mr. J. ROWLANDS in the chair.

Mr. E. KING (the secretary) read the notice convening the meetings, and the minutes of the last were read and confirmed.

A statement of accounts for the four months ending December showed—

December mine cost, merchants' bills, &c.	£ 503 4 6	
January ditto	362 2 6	
February ditto	418 18 3	
March ditto	384 19 7=	£1669 4 10
Balance last audit	£ 31 8 3	
Call	250 0 0	
Sale of copper ore	1285 2 6=	1566 10 9
Leaving debit balance		£ 102 14 1

The report of the agent was read, as follows:—

May 13.—I beg to inform you that during the past four months Hallett's shaft has been holed to the 55, also divided it, and put in footway from surface to the 43 fm. level, so that we can get the flat-rods to work at a short notice, when required. The bobs and rods at the surface being completed. They have commenced to sink this shaft below the 55, where the lode is 1 ft. wide, worth about 15*l*. per fm. There is a good prospect of this opening profitable ore ground. The 55 east has been driven 9 fms. on a lode varying from 12 to 15 in. wide, worth on an average about 13*l*. per fm. The lode in the present end is 1 ft. 4 in. wide, worth 14*l*. per fm. In this level there has been discovered a good lode in the bottom for nearly the whole length from its intersection by the sump cross-cut (about 20 fms.), but the back has not been rich. In the stope over this level, east of Hallett's shaft, the lode is 1 ft. wide, worth 12*l*. per fm. In the 55 west it has been driven 9 fms. 1 ft. on a lode from 9 to 14 in. wide, producing stones of ore, but not to value. In the present end it is much of the same character, and is similar in appearance to the level over before reaching the run of ore ground. I calculate shortly to reach this point, and have confidence in its being equally productive. In consequence of the water we have sunk but little in the 43 winze, west of cross-cut; it is now partially drained by the 55, and the sinking is resumed; the lode is 9 inches wide, worth 18*l*. per fm. In the stope west of this winze the lode is 1 ft. to 15 in. wide, worth 25*l*. per fm.; you will observe this is the run of ore we expect to reach in the 55 west. The 43 cross-cut, south of King's, has been driven towards the engine lode 5 fms. 2 ft. The ground has been hard, but I think it will improve as it approaches the lode. The whole of the ground driven in this cross-cut is 10 fathoms. I calculate about 5 fms. more will intersect the lode. This is an important operation, as it is in a good position with the elvans and cross-course; should it prove as productive as in the shallow levels it will greatly enhance the value of the mine. I consider the prospects encouraging, and shall push on the various points of operation with all possible dis-

patch. I purpose in the coming four months to sink Hallett's shaft by nine men. Drive the 55 east by six men. Drive the 55 west by six men. Sink the 43 winze by six men and three boys. Drive the 43 cross-cut by four men, and shortly to resume the sinking of King's shaft by six men. Also to stope on tutwork, or set on tribute the available ground, as may be advisible. I estimate the cost to be about 350*l.* per month, and to return ore to the amount of 1200*l.* for the four months; but as much depends upon how the lode opens in Hallett's shaft and the 55 west, I cannot be definite; it is probable it will considerably exceed that amount.—J. JAMES.

The CHAIRMAN stated that the costs of the past four months had been increased by the expense of piacing flat-rods and cutting down Hallett's shaft below the 55. Those items of plant were charged in the statement of accounts just presented, in consequence of which there was a small adverse balance.

A SHAREHOLDER enquired what were the prospects of the cross-cut going out from the north lode?—The SECRETARY explained, by means of a section, the position of the south lode, and the bunch of ore that had been met with on it at about the 12 fm. level. At the 22 a dead piece of ground was met with, and the lode became poor; a cross-cut was now going out from the north lode to intersect this south lode at the 43, which was some 8 or 10 fms. above the elvan course—in fact, in such a position that he could not see why the lode being productive to the north, above the elvan-course, it should not make a course of ore in the parallel ground in the south lode. The agent stated if this should be found productive, the value of the mine would be very much increased.

Mr. PRODHAM enquired whether the shaft from the 43 to the 55, on the north lode, had not been sunk through unproductive ground?

The SECRETARY stated, for that distance the ground was certainly unproductive, but after passing through the elvan course for some two or three fathoms the lode became productive, and they were now sinking on a lode valued at 15*l.* per fm. It seemed to him, from what had been seen in the 55, that they had a new shoot of ore forming under the elvan.

Mr. M'CALLAN enquired the estimated returns and costs of the current four months?

The SECRETARY replied that the agent estimated the costs would be something like 350*l.* per month, and that the returns would be 1200*l.*, or 300*l.* per month; but much depended upon how the lode turned out in Hallett's shaft, and in the 55 west. If those lodes turned out productive, the agent computed that the returns would considerably exceed the amount he had estimated; and, moreover, the computation was made upon the present standard. There could be no doubt the mine was turning out remarkably well. The lode continued to increase in size and value as depth was attained.

The report and accounts were then received and adopted.

Mr. M'CALLAN thought it would be advisable to make a small call, and enquired if the committee were prepared to recommend any sum?

Mr. HANLEY (a member of the committee) stated that it was thought prudent to make a call of 1s. per share, which amount would be quite sufficient for all their present requirements. From the agent's report it would be seen that the bottom of the mine was opening up very satisfactorily; and he hoped their most sanguine anticipations as to the mine becoming a permanently paying property would soon be realised.

A call of 1s. per share was made, and the committee of management were re-elected.

A vote of thanks to the Chairman terminated the proceedings.

ST. DAY UNITED MINING COMPANY.

A general meeting of shareholders was held on the mine, on the 9th inst.,

Mr. JOHN BALSTER in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

A financial statement for the seven months ending March showed—

Sept. mine cost, merchants' bills, &c.	£2768	18	9			
October ditto	2798	17	6			
November ditto	2911	10	8			
December ditto	2883	5	10			
January ditto	3104	8	5			
February ditto	3544	16	7			
March ditto	2983	5	11			
80-in. cylinder engine	2250	0	0=	£23,245	3	8
Balance last audit	£ 476	17	5			
Copper ore sold	1585	14	5			
Tin ditto	8958	19	0			
Stamps' rent	134	8	0			
Sundry creditors, old materials, &c.	77	5	3			
Balance of Consols account	4	11	0=	11,237	15	1
Leaving debit balance				£12,007	8	7

Mr. F. PRYOR (the manager) read the report, as follows:—

May 8.—The following is our report, which not only contains the prospects of the mines, but it will also explain the work done since the last meeting of adventurers, and also the objects we intend carrying out for the future, if approved of by the shareholders. Billing's shaft is now down 2 fms. below the 164: the lode is 4 ft. wide, and worth 70*l.* per fathom for length of shaft, which is about 11 ft. long. The 164, east of this shaft about 30 fms., is worth 40*l.* per fathom, and presenting good appearances. The level is within 5 fms. of Opie's shaft, and when communicated will not only lay open a good piece of ground, but will also well ventilate the same. A portion of this ground driven through has been worth at times 100*l.* per fm., and will average for the whole drivage 50*l.* per fm. The 164, west of Billing's shaft about 15 fms., is worth, and has been for the whole drivage, 40*l.* per fm. The stopes in the back of the 164, east of shaft, are worth 20*l.* per fm. The stopes in the back of the same level, still further east (behind the end 15 fms.) are worth 55*l.* per fm. The stopes in the back of the 164, west of shaft, are worth 35*l.* per fm. Opie's, or the new engine-shaft, is sunk 3 fms. below the 154; the lode is from 5 to 6 ft. wide, and is worth fully 20*l.* per fm. The 153 is driven east of this shaft 15 fms.; the lode is 2½ ft. wide, and producing saving work for tin, with good appearances. We have two stopes in the back of this level which are worth 30*l.* per fathom. In the 154, west of Billing's, the lode is large, and worth 12*l.* per fathom. We attach much importance to this end, as it is getting near a good run of tin ground gone down in the levels above. One stope in the back of this level is worth 15*l.* per fm. We have also a stope in the back of the 140 which is worth 10*l.* per fm. The lode in the 124, west of Trussall's shaft, on the tin lode, is very large; in fact, we have not seen either of the walls, although we have cut through it 18 ft. The 114, on the same lode, and about 100 fathoms further west, is worth 12*l.* per fm. This end is driving in whole ground, and if we may judge from appearances, and looking at the whole of the ground taken away above, we have certainly a right to expect good discoveries.—Bissoe Pool: We have not been able to drive the 163 for some time in consequence of the water, but now the erection of Opie's engine is completed we shall be enabled to develope this part of the mine to a much greater advantage, and prove it at a much less cost than heretofore. The 153, west of shaft, is producing good stones of ore. The 140, still further west, and reaching the ore ground said to have gone down in advance of this end about 4 fms., is now worth fully 2 tons per fm., with good appearances. Since the last meeting of adventurers we have completed Opie's shaft, both by cutting it down and making it new where required to the 154, and have sunk 3 fms. below that level; fixed the pitwork, and done every other necessary work in connection therewith, built the engine-house, and all other necessary buildings, and put the new 80-inch cylinder engine to work. I think it right, however, to say that we met with difficulties in endeavouring to find a firm and solid foundation which we did not bargain for; so difficult, indeed, was it to find a good foundation that the clearing of it and the extra granite actually required to make it safe involved a large sum, not less than 300*l.* more than we could possibly have anticipated, besides the delay. We have also laid out in improving our tin dressing-floors about 300*l.*, and have as well kept in every respect all necessary materials on the mine for the efficient and effectual working of these extensive mines. From this report you will observe that the most important points to be carried out are at the bottom of this mine, and in about four weeks we shall be enabled to carry out our views with more expedition than we ever have been able to do before, as we shall then have full power to sink Opie's shaft, which is in the centre of the tin ground. We shall then also be enabled to sink Billing's shaft by virtue of a chain through the 144 fm. level, until Opies shaft is sunk below Billing's, as the success of this mine will depend on opening up of ground fast. Having proved in a mine-like manner various parts of this extensive sett—Wheal Maid, Wheal Unity, and for the present Trussall's copper lode, I have, after a long consideration, decided with the agents to confine our operations to the Poldice district, which has left a profit ever since the mine has been working by the present company, and which never presented such good appearances as at present.—FRANCIS PRYOR, Manager; E. RALPH, J. COCK.

The CHAIRMAN said, before proposing the adoption of the accounts, he would say a word or two in reference to the handsome and exceedingly liberal manner in which the lords of the manor had treated the shareholders in these mines. He was glad to see present the representatives of the lords, and he had much pleasure in saying that they had agreed to give up the dues for two years, which he (the Chairman), with their manager, estimated to be about 2400*l.* He, therefore, had great pleasure in proposing that the best thanks of the meeting be given to the lords, especially to Mr. Williams and Mr. Whitford, for the kind manner in which they had treated them.

Mr. ISAAC (of Liskeard) highly eulogised the liberality of the lords and their representatives, and felt great pleasure in seconding the proposition of the Chairman.

This having been put to the meeting, was carried with acclamation.

The CHAIRMAN said the next matter he had to bring before the meeting was one of finance. The committee had fully gone into the accounts, and had also carefully examined the present and future prospects of the mine with the manager, and although the accounts showed a debit balance of 12,007*l.* 8s. 7d., the committee were unanimously of opinion that a call of 8s. per share was quite ample to carry them through, and enable them to place the mines in a sound and healthy condition, as they would have a considerable amount to receive from the lords, and also a large amount to be credited from the sale of spare materials.

Mr. E. COOKE said he should like to see a call made of 10s. per share, as that would enable them to clear off every liability to the end of March, and he thought that by doing so the public would have more confidence in the concern, as they would much prefer embarking their capital in a concern with no debts than they would where there was a balance against the mine. But after looking, however, at the excellent prospects of the mine, together with the returned dues, and as the committee had, no doubt, gone carefully into the matter, he should support that the call of 8s. per share be made.

Mr. HENRY GRYLLS said he had looked through the accounts, and he really thought that a larger call ought to be made, as they could not calculate upon the sale of the spare materials for some time, and, therefore, they could not take it as an available asset at present.—Mr. WATERS also thought that a 10s. call ought to be made.

The SECRETARY thought before they arrived at the resolution as to the amount of call, 8s. per share, being sufficient to discharge the liabilities, they should obtain from Mr. Pryor his opinion as to whether that amount would be sufficient for all their requirements. From his thorough knowledge of the property, Mr Pryor was well qualified to give such opinion.

Mr. PRYOR expressed the greatest confidence in the future of the undertaking. He had fully deliberated upon the question of call, and quite agreed with the recommendation of the committee—that a call of 8s. per share should be made.

After some further discussion, a call of 8s. per share was made, to be paid in two instalment—4s. per share in 30 days, and 4s. on or before August 2, and no share or shares to be transferred unless the whole of the call be paid.

Mr. PRYOR, in answer to questions, replied that Opie's engine-shaft had been sunk 3 fms. below the 154, in a lode worth 20*l.* per fm. This shaft was going down in the centre of the run of ore ground; and in two months he hoped Trussell's engine would be turned idle, and the whole of the flat-rods drawn to surface. There would be two sumps going down in a splendid course of tin, at a distance of 35 to 40 fms. apart. From the value of the run of tin discovered for the whole length of ground in the 164, and the present ends still being worth 40*l.* each, he looked forward to making St. Day United one of the most successful mines in the county. The present price of tin was acting most severely against them, but he trusted that would not long continue, and that with a return of 35 to 40 tons per month, a handsome profit would be left to the proprietors.

On the proposition of Mr. PRYOR, seconded by Mr. COOKE, the committee were re-elected, and a vote of thanks given them for their services, when the meeting was made special, for the purpose of reducing the number of shares from 20,000 to 4000. This having been proposed and seconded, was carried unanimously, and thus ended one of the most pleasant meetings (considering the amount of money called for from the shareholders) that we have ever had the pleasure of attending.

ENGLISH AND CANADIAN MINING COMPANY.

The fourth annual general meeting of shareholders, having been adjourned from April 30, was held at the offices, Broad-street-buildings, on May 8 (Mr. ALEXANDER MORRISON in the chair), when shareholders, holding 1896 shares, were present.

The balance-sheet, duly certified by Mr. Thomas H. Gladstone (the auditor) was exhibited, showing the following results:—

Freehold estate in the colony, including the purchase, and outlay of all kinds for its development	£42,758	2	4			
Personal property, including plant and stock at the mines, and cash in hand	2,695	7	10			
Preliminary and London office expenses, &c.	1,299	13	5=	£46,753	3	7
Capital paid in full	£40,000	0	0			
Interest, discount, &c.	92	7	3			
Bills payable outstanding	2,025	0	0			
Copper ore balance	1,264	6	11			
Loan at 8 per cent.	3,000	0	0			
Month's advance due Mrs. Bennetts	8	6	8			
Due local committee of management	363	2	9=	£46,753	3	7

The directors' report was read, and, on the motion of the CHAIRMAN, seconded by Mr. JOHN L. BENNETT, was adopted. It stated that whilst four years had elapsed without profits arising to afford a dividend, the indications of mineral wealth were, and continue to be, very encouraging. It informed the shareholders that up to this date, out of the loan for 8000*l.*, authorised to be contracted by the general meeting of February 28, 1861, 5000*l.* had been taken and applied to the necessary operations of the company. In the spring of 1861 a fire unfortunately occurred on the premises at Harvey Hill, which, besides occasioning a loss of 300*l.* or 400*l.*, had materially retarded the work of dressing, so that it was not till November that a shipment of 1861 ores was made, which was subject to a very high rate of insurance. The directors had given every attention to reducing expenses at the mines, and to confining operations to works of a remunerative character, and in the interest of the shareholders had dispatched Mr. Tregoning, an experienced mining engineer and chemist, to Canada, to inspect and report on the estate and operations generally, and to ascertain the best means of bringing the low percentage ores to a profit. The nett amount of ores sold last year was 543*l.* 19s. 3d., but a parcel, the produce of 1861, had since been realised, which had netted 1078*l.* 9s. 3d., and about 50 tons of 36 per cent. ore was either ready for shipment or in a very forward state at the mines. In consequence of the regretted death of Mr. Charles Tilt, his place in the direction had been filled up by Mr. Henry Sewell.

The CHAIRMAN echoed the regret expressed in the report that, notwithstanding the flattering auspices under which the company originated, and in spite of the unremitting exertions of the board, the success of their operations had hitherto been so very limited. He stated that the reports received from time to time were still very favourable, and led the directors to hope that their own labours, and the pecuniary sacrifices which they and their brother shareholders had made, would be finally rewarded with profit. He read a letter which he had very recently received from Dr. Fremont, one of the principal Canadian shareholders, who had frequently visited the mines, and made himself fully master of the operations there. Unfortunately, the principal object of his last visit—to ascertain the quantity of low quality ores, and the applicability of the process proposed for utilising them—had been defeated by the severity of the weather, the large piles of poor ores being buried in snow; he was, therefore, unable to speak decidedly on these points, on which he refers to the opinions of Mr. Williams and Captain Bennetts. He cannot, however, help thinking that they will yield several hundreds of pounds. He is still hopeful of ultimate success. The Chairman added that Dr. Fremont had given the best practical proof of his confidence in the solidity of the undertaking in adding to his already large stake in the company, by a recent purchase of shares to a considerable amount.

Mr. JOHN L. BENNETT, referring to the inspection of the mines about to be undertaken by Mr. Tregoning, expressed his confidence in the skill, experience, and judgment of the gentleman, auguring very favourable results to their enterprise from his visit. He mentioned that, in course of conversation, Mr. Tregoning, judging from the specimens and reports submitted to him, had expressed a very good opinion of the value of the Harvey Hill property, and had stated that no mine in Cornwall could produce ore capable of dressing to so high a percentage as that recently produced from the 30 fathom level, in Kent's shaft. Mr. Bennett added that he himself was still much inclined to think very well of the undertaking, notwithstanding its non-success hitherto.

Mr. S. A. SEWELL, having visited the mines, gave it as his opinion that of the existence of ores in large quantities there could be no question. His inspection had satisfied him that the original capital would not suffice to make the property remunerative, and on his return he had suggested the propriety of raising fresh funds. He enquired whether Mr. Williams had continued prospecting, with a view to render available the mining capabilities of other parts of their extensive estate, besides those already worked upon. He described the mining mania as very strong in the Megantic district, and said that fabulous prices had been paid for lands in the vicinity of Harvey Hill.

Mr. STOBART (the hon. secretary) explained that costeaning had been rather extensively pushed forward last year, and had been rewarded by the discovery of three new lodes, at no great distance from Kent's shaft. These had been named after three of the directors, and two out of the three had continued to give from surface working very satisfactory results until winter put a stop to all operations exposed to the weather. Surface explorations would be resumed this spring, and continued as energetically as the means of the company would in prudence permit. He added that in the 30 fm. level, at Kent's shaft, a rich lode had been discovered, to which the name of Fanny Eliza had been given. This had at first yielded a very considerable amount of rich ore, but he regretted that recent reports state that the lode had become much poorer. He advocated perseverance in the works on an economical scale, in hopes of fresh discoveries, believing that success in these would operate most beneficially on the general value of the company's large estate.

Messrs. J. R. Morrison and W. Stobart, the directors who go out by rotation, were re-elected. Messrs. T. H. Gladstone and Robert Porter were elected auditors, with thanks to Mr. Gladstone for his able services. Votes of thanks were also given to the local committee of management, and to Messrs. H. Williams, John Porter, and F. Bennetts, jun.

On the motion of Mr. R. PORTER, seconded by Mr. S. A. SEWELL, the best thanks of the shareholders were unanimously voted to the Chairman, the board of directors and the honorary secretary, for their able management of the company's affairs during the past year. The proceedings then terminated.

PROVINCIAL BANK OF IRELAND.

The 37th yearly general meeting of proprietors was held on Thursday, at the offices in Broad-street, Sir MINTO FARQUHAR, Bart., M.P., in the chair.

The advertisment convening the meeting was read.

The CHAIRMAN said the board had called the proprietors, as usual at this time of the year, for the purpose of receiving the annual report of the directors. The advertisement having been read, they would proceed to the election of the directors; and, that business finished, the secretary would read the report.

The retiring directors, Messrs. Matthias Wolverly Attwood, Bonamy Dobree, jun., Elliot Macnaghten, and Sir John Young, Bart., were severally elected unanimously.

The SECRETARY then read the following report to the proprietors:—

In meeting the proprietors on this occasion the directors will, as usual, refer briefly to some of the distinguishing features of the past year. They regret to state that it was not a year favourable to the interests of the agricultural or trading classes in Ireland. The summer and autumn of 1861 turned out very wet and ungenial, and the produce of the harvest was much under an average; while the potato crop, also, was very deficient, and of inferior quality. This being the third unfavourable season in succession, the result has very injurious to the agricultural classes, especially to the numerous small farmers, who depend mainly on tillage. The country trade necessarily suffered in consequence of the diminished resources of the farming classes, while, at the same time, the linen trade, a staple manufacture throughout the North of Ireland, has been materially interrupted by the unhappy civil war in America. These circumstances have rendered it necessary for the directors to exercise the greatest care in conducting the business of the bank in Ireland, while, on the other hand, they have readily met the demand which arose for increased accommodation whenever it could be prudently done. The directors cannot omit to mention that considerable distress has existed amongst the poor and labouring classes, and it is too apparent that this has been on the increase each year since the autumn of 1859, the first of the three consecutive deficient harvests before referred to; but it was much aggravated during last winter by the great scarcity of fuel, the usual supplies of turf not having been saved by reason of the continuous wet weather throughout the summer and autumn months of last year. In referring to the value of money, the directors require only to state the fact that the Bank of England's minimum rate of interest underwent no fewer than ten alterations between March, 1861, and Jan., 1862, the tendency, with one exception in May, being gradually downwards from 7 per cent. to 2½ per cent.; but, notwithstanding the low rates which prevailed for the last six months of the year ending 29th March last, the directors have the pleasure of stating that the result of the bank's operations during that period has been satisfactory, as shown by the following statement, to which the attention of the meeting is now requested:—

The account submitted to the yearly general meeting in May, 1861, showed the amount of rest, or undivided profits, at March 30, 1861 ..							£251,693	8	5
Out of which there has been paid to the proprietors the amount of two ordinary and extraordinary dividends, as follows:—									
At Midsummer, 1861—Ordinary dividend of 4 per cent.	£21,600	0	0						
Extraordinary dividend of 6 per cent.	32,400	0	0=	£54,000	0	0			
At Christmas, 1861—Ordinary dividend of 4 per cent.	£21,600	0	0						
Extraordinary dividend of 6 per cent.	32,400	0	0=	£54,000	0	0=	108,000	0	0
Leaving a balance of							£143,693	8	5
To which there has since been added the amount of nett profits for the yearding on the 29th, being the last Saturday, of March, 1862, after deducting property tax, and providing for all bad and doubtful debts ..							111,355	11	4
Making the rest, or amount of undivided profits, March 29, 1862..							£255,048	19	9

Out of which the directors intend to pay, in July next, an extraordinary dividend of 30s. on each 100*l.* share, and 12s. on each 10*l.* share of the capital stock of the bank, in addition to the ordinary dividend of 4 per cent., making the amount to be then paid 2*l.* 10s. on each 100*l.* share, and 1*l.* on each 10*l.* share, for the half-year ending at Midsummer next, and they will also, as heretofore, pay the property tax for the proprietors.

The CHAIRMAN, in moving the reception of the report, said he thought he should have very little to say on this occasion, as the points of special interest were touched upon in the report, and he had really little to add; but he could not take the chair without the expression of his regret that his tried and valued friend, Mr. Oliver Farrer, who was to have taken the chair, had declined to act in that capacity, as he did not feel well, and he (Sir Minto Farquhar) was, therefore, called upon to take his place. When he spoke of Mr. Farrer as a tried and valued friend, he was truly that to the proprietors of this bank, and he hoped he would often again fill the chair. (Hear.) With reference to the report, every man who was a proprietor in this bank, which stood high in public estimation in Ireland, must be aware from the reports which had appeared in the papers, that the agricultural position of that country had not been equal to what it had been in recent previous years. The secretary had read to them a statement, showing that there had been three successive deficient harvests, a fact which must, of course, most materially affect the country, and increase the distress among the poorer classes during that period, and also small traders and farmers, who derived their support from agricultural pursuits. But, notwithstanding the depressed condition of the small farmers and the retail tradesmen, the improvement in the culture of the land, and of drainage especially, continued, and the prices of cattle were so high that the gazing farmers had been less exposed to pressure than those who were occupied in tillage. In reference to the distress which existed in Ireland, it must be stated that while it increased in the three years it was small in comparison with that which existed ten years ago, [illegible] peared that, whereas in 1851 the poor law expenditure was 1,102,000*l.*, the number received in-doors being 706,278, and the number out of doors being [illegible]; in the 1861 the expenditure of the poor law was 516,769*l.*, the number relieved in-doors 203,422, and the number out of doors 14,000; therefore, there was a great reduction to 1859. Since the year 1860 and 1861 there had been an increase in this distress; the annual report oft he Commissioners for administering the law for the relief of the poor in Ireland, published this year up to September, 1861, showed that it was [illegible] there would be a considerable increased expenditure to record at the close of the 1861-62; but, on the other hand, the prices of food were lower than they were last, the cost of the workhouse maintenance (the sure and undeviating index) had fallen from 2s. 5d. to 2s. 3½d. per week for each person. They ought, indeed, to be thankful there had been so large an importation of food into the country, and that relief had been administered from that circumstance. Last year, when he had the pleasure of meeting the proprietors, he told them that he was afraid that from the state of the war in America the linen trade would be exposed to pressure from that event, but he [illegible] would find other outlets. Now, with regard to the position of the Bank in Ireland, he would only say that he never met an Irishman who did not state that this bank stood well in the country, and he had no doubt they would continue to hold that good [illegible] The board intended to build a new banking-house in Dublin, and also one at Cork, [illegible] were required from the necessity of increasing and extending the establishment, [illegible] them better to carry on their business. He had very little more to say, and could express his satisfaction (taking into consideration what had passed, and the fluctuations which had occurred in the value of money, as read by the secretary) that they were still able to offer the proprietors a dividend at the rate of 20 per cent., as they had now done for several years, and to make, at the same time, a small addition to the [illegible] He begged to take this opportunity of stating that the board had every reason to be satisfied with the manner in which their affairs in Ireland were carried on. The [illegible] was most fortunate in having the services of their superintendent, Mr. Murray, in Ireland, especially when that gentleman was so efficiently and admirably supported by their secretary, Mr. Hewat. In conclusion, he begged to move that the report be [illegible] printed, and circulated among the proprietors.

Sir BURTON MACNAMARA wished to know, as the subject of the distress prevailing in Ireland had been alluded to, whether this bank had subscribed to the relief of the distress. He was much pleased to know that the board had subscribed to the Prince [illegible] sort Testimonial.

The CHAIRMAN replied that they had subscribed in every case. They had not [illegible] refused any appeal made to them. He believed they had contributed about [illegible] mitigating the distress in Ireland.

Mr. OLIVER FARRER having seconded the motion, it was carried unanimously.

Mr. OLIVER FARRER said, before the meeting separated he should like to have the [illegible] viledge which had often fallen to his lot—a privilege which he never sought to [illegible] with more sincerity of feeling than on this occasion. He begged to propose the [illegible] of the proprietors to Mr. Murray and Mr. Hewat—(applause)—and the other officers of the bank for the industry, the zeal, and judgment with which they had conducted the affairs of the bank. Let honourable gentlemen remember that when times were [illegible] rious the cares and anxieties of gentlemen filling the positions of those he had [illegible] to were of necessity greatly increased. From seeing Mr. Hewat every day that he [illegible] in London he was confident that his care and diligence could not be sufficiently [illegible] sated. Mr. Murray they had not the advantage of seeing so often as Mr. Hewat [illegible] really the establishment could not go on without the exertions of Mr. Hewat, [illegible] whom he sometimes feared the pressure was too much, and that he did not allow [illegible] self that amount of relaxation which his valuable health required. He begged to [illegible] the thanks of the meeting to Mr. Murray and Mr. Hewat for the unceasing care, [illegible] try, and talent with which they conducted the business of the bank. (Applause.)

Mr. CHAPMAN rose to second the motion, which he did most cordially. Mr. [illegible] had stated that they had not the opportunity of seeing Mr. Murray so often as they [illegible] Mr. Hewat, but he himself had last summer visited the Dublin branch and several [illegible] branches, accompanied by Mr. Hewat, and he could bear testimony to the zeal [illegible] by Mr. Murray. The bank enjoyed the confidence of the public, and the respect [illegible] classes. He could not but feel much surprised at finding that their friend, Mr. [illegible] was acquainted with the affairs of every branch, as much so as if he had been the manager of the whole.

The resolution having been put, was carried with acclamation.

Mr. HEWAT, on behalf of Mr. Murray and himself, expressed his grateful thanks [illegible] directors and proprietors for the kindness which had been shown them on this [illegible] other occasions.

Mr. PHILLIP TWELLS move a vote of thanks to the Chairman and directors, [illegible] doing so referred to their able management of the affairs of the company, as best [illegible] strated by the dividends which they had declared. The proprietors had been most [illegible] tunate in having the affairs of the bank administered by a board of gentlemen of [illegible] judgment, and of an enterprising spirit.

Mr. WALTER LUCAS seconded the motion, which was carried unanimously.

The CHAIRMAN thanked the proprietors on behalf of himself and colleagues for this vote of thanks, which had been carried so cordially, and he hoped the directors [illegible] continue to deserve this favourable expression of feeling. They would all deeply [illegible] rested alike in the success of the bank. The interests of the directors and of the proprietors were identical—they went together. (Applause.)

The meeting then separated.

TRUTH'S ECHOES: OR SAYINGS AND DOINGS IN MIN[ING]

There has been considerable activity in the Mining Share Market during the [illegible] week; the preparation for the settlement and Account-day (which came off on [illegible] day), the great demand and rise in several stocks, together with the general [illegible] of the week, have all tended to create a busy week. The rise which has taken place been in EAST CARADON, LUDCOTT, EAST CARN BREA, WHEAL GRENVILLE, &c., [illegible] of which extensive dealings have followed. The Account passed off as usual, [illegible] a fair supply of shares, although EAST CARADONS were rather short with [illegible] DEVON CONSOLS have been and continue in request, but the scarcity of shares [illegible] *bona fide* business.——WHEAL SETON, SOUTH FRANCES, and WEST SETON have [illegible] dealt in at quoted prices.——SOUTH CARADONS have been in fair request, but [illegible] actions reported.——EAST CARADONS have had a very considerable rise, and [illegible] number changed hands at the higher rates; but they have since receded a little, [illegible] the constant dealings will, no doubt, bring them to their former price. The [illegible] which has taken place is probably in anticipation of cutting the 70 rich, as no [illegible] ment has taken place.——MARKE VALLEYS continue in good request, at present [illegible] ——WEST ROSE DOWNS continue being sought for, but still scarce.——WEST [illegible] have experienced an extraordinary rise, and although they receded a little the [illegible] for the stock will, no doubt, improve the price. The demand and consequent [illegible] lowed the announcement of the sale of silver which took place on Saturday [illegible] NORTH PHŒNIX continue in favour, but from the scarcity of shares few trans[actions] have followed.——WEST CARADONS have been in better demand, at higher rates. MARY ANN and TRELAWNY have been rather quiet.——HERODSFOOT find buyers [illegible] market quotations.——SOUTH TOLGUS and GREAT SOUTH TOLGUS have been and [illegible] in demand, and prices have consequently advanced.——WEST TOLGUS offered lower [illegible] EAST BASSET, NORTH ROSKEAR, and NORTH CROFTY have changed hands at [illegible] prices.——TINCROFTS have advanced, being in request, and sellers not plentiful.——WEST STRAY PARK and STRAY PARK are also enquired for, and prices firmer.——CARN BREAS have been largely dealt in; they took a sudden rise, and fairly [illegible] the quoted prices throughout the week.——WHEAL GRENVILLE and EAST GR[ENVILLE] have shared largely in the transactions of the week; in the former shares [illegible] advanced.——NORTH DOWNS and NORTH TRESKERBY have been dealt in, but they have not advanced.——TOLVADDEN and ROSEWALL HILL AND RANSOM have been quiet, and the little done has not been at improved rates.

NEW SOUTH CARADON have been in fair request, and shares improved.——[illegible] CONSOLS, EAST GUNNIS LAKE, and NORTH ROBERT are being dealt in at nominal [illegible] ——EAST WHEAL JANE and GLASGOW CARADON have been enquired for, but the business rather limited.——WHEAL GRYLLS and EAST WHEAL GRYLLS have been [illegible] in, and shares still in request.——GREAT WHEAL FORTUNE, PROVIDENCE, and ST. [illegible] CONSOLS are being enquired for; the former has slightly improved.——Several [illegible] FORD HALL shares have changed hands, at nominal prices. There has been [illegible] exists a good enquiry for LONG RAKE shares, but the transactions have been few, [illegible] scarcity of the shares.——BRYN GWIOGS have been dealt in at market quotations [illegible] VALE OF TOWEY and CENTRAL MINERAL have been freely enquired for, the [illegible] minimum prices.——WHEAL GRENVILLE: The lode in the rise above the 110 [illegible] last week worth from 2 to 2½ tons per fathom, and is reported to have fallen off in [illegible] They expect to communicate this with the 100 in the course of another week, [illegible] western end will be resumed. The rise in the 100 is yielding 2 tons per fm. The [illegible] below the 90 is worth 1½ ton per fm., and the several pitches maintain their [illegible] The new lode in the 80 east is large, and producing good work for tin, but the [illegible] at present. They have about 12 fathoms more to drive the cross-cut to intersect the new lode at the 66.——ROSEWARNE UNITED continue heavy.

COOK'S KITCHEN: The accounts for four months, ending February, show a balance of 899*l.* 9s. 7d. in favour of the mine, from which a dividend of 7s. per share was [illegible] The profit on the four months' working is given at 815*l.* 2s. 3d. The prospects [illegible] mine are very good: the lode in the engine-shaft is valued at 150*l.* per fm. for [illegible] (12 feet). The 234 east is worth 28*l.*, and west 20*l.* per fathom, and looking to [illegible] The sump-winze, in the same level, is worth 60*l.* per fm. The 222 end east is [illegible] 30*l.*, and the winze 140*l.* per fm. The 212 end east is valued at 25*l.* per fm. The [illegible] several important points to come off which, when accomplished, will no doubt [illegible] augment the returns and profits. These improvements, which are of recent date, [illegible] been the cause of the great rise which has taken place in the shares, and, although expenditure is large, there is every ground to calculate on proportionate profits [illegible]

At WEST SHARP TOR the lode in the 162 is not looking so well at present as [illegible] ported, the ground having become harder, but a change is again anticipated.

At EAST CARADON the 50 east, on the caunter, is worth 40*l.* per fathom, and [illegible] east is valued at 60*l.* per fathom.—New Lode: The 60 east is poor at present, [illegible] 50 east saving work. The 60 west is worth 20*l.* per fathom. Fawcett's lode, in [illegible] east, is unproductive. The next monthly sale will be 445 tons.

At the NORTH PHŒNIX meeting, on Tuesday, the agent's report confirmed the [illegible] ments made last week, and from the value of the lode now in the winze sinking [illegible] the 100 there is every reason to calculate on a valuable lode being met with [illegible] 120 approximating that point. The ground has already changed for the better. [illegible] before the next meeting an important discovery is fully anticipated. The [illegible] nearly down for a 140 fm. level, and when completed, and the lode cut at that [illegible] it is hoped that another prize will be added to the Caradon district.

WHEAL LUDCOTT is reported to be looking very promising in several of the levels [illegible] lead, showing appearances of an early improvement in important points. They [illegible] on Saturday last 3 tons 11 cwts. of silver ore, which realised 1341*l.* 18s., and [illegible] expect to sell about 700*l.* worth this week, and have in course of preparation about [illegible] which will be sold next week, and is expected to realise from 800*l.* to 1000*l.* They [illegible] raising silver in the cross-course below and above the 70, and sinking a winze [illegible] the 60, to communicate with the 70, and expect to reach the cross-course in the [illegible] shortly, which will drain the 80, and enable them to continue that level.

At DRAKE WALLS the lode in the 102, east of Matthew's shaft, has been disordered [illegible] a branch of spar, but the lode is still worth 10*l.* per fm., and an early improvement [illegible] anticipated. The 80, west of Betteley's, is looking better, the tinny portion [illegible] worth 10*l.* per fm. The 50, west of Brenton's, has improved, and is worth 15*l.* [illegible] Other places are looking much as usual.——At SORTRIDGE CONSOLS the lode in [illegible] west has been taken down, and reported worth 20*l.* per fm., and indicative of [illegible] improvement. The continuance of the ore west is highly important, inasmuch as [illegible] have an extensive piece of virgin ground in that direction, and until lately no [illegible] been met with. The rise in the 30 east has improved, and is valued at 20*l.* [illegible] Other places continue much the same as last noticed.

At LADY BERTHA no change has taken place in the 53, or bottom level, but they continue to look promising. The 30 end east is large and encouraging, carrying [illegible] stones of copper ore. The stopes in the bottom of the level are worth 4 tons [illegible] and the rise in the back of the same level is yielding 3 tons, but rather coarse [illegible] The pitches continue much the same as previously reported.

At EAST GUNNIS LAKE the 36 east, which improved last week, is reported to [illegible] its value and and appearance. All other productive places continue [illegible]

Devon Consols continue to hold out much promise, and although the expected [...]ry in the 40 has not yet taken place, the ground has become much easier, with favourable appearances.——Devon and Cornwall United remains unaltered, [s]everal productive points maintaining their value and character, and should the [h]old down, of which there is no doubt from present prospects, a permanent and [ac]tive mine may be fully expected.——West Devon is reported to be improving [...] engine-shaft, the lode being 18 in. wide, of a very promising character, carrying [s]tones of copper ore, and looking well for further improvement in sinking.

[Gre]at Retallack: No change in the value of the ground has taken place since last [...], but they have communicated the 45 to the 53, and resumed driving the latter [...] the lode presenting the same appearances as last reported.——At Wheal Hope [...] west affords evidence of a favourable change at hand. The 28 east, on south lode, [yie]lding some good work for lead; and the 14 west, on the middle lode, is yielding 3 cwts. per fm.——North Treskerby is looking remarkably well in several im[portan]t places. The lode in Tresidder's shaft is worth 60*l*. per fm. for tin and copper. [...]7 east is worth 3 tons per fm.; the 47 is looking well. In the sump-winze at [...]barrow is also a fine lode. In boundary shaft, sinking below adit, is a good look[ing lo]de, now worth 20*l*. per fm. The mine, upon the whole, never looked so well. [...] sampled on Wednesday 339 tons of ore, being of better quality by 1*l*. per ton than [be]fore.

[Eas]t Carn Brea continues to look remarkably well. The 50 east is worth from [...] 60*l*. per fathom, the 50 west is valued at 20*l*. per fathom, the 40, east of cross-[course,] worth 28*l*., and east of the western shaft it is valued at 30*l*. per fathom, and the [...], on middle lode, is worth 20*l*. per fathom. An accident happened on Saturday to [the] gudgeon of the main bob, which stopped the engine, and caused the water to rise con[sidera]bly; this was expected to have been repaired by Wednesday last, and the water [...] in course of forking.

[...]a Consols Mine continues to hold out much promise, having several important [...] coming off, which when effected will augment their returns. The carbona is with[out an]y change since last reported, the work being taken away by twelve men, at 7s. 6d. [...] The general prospects of the mine are highly encouraging. They sold on Tues[day] last 4 tons 13 cwts. 2 qrs. of black tin, which realised 309*l*. 10s., being the produce [of t]he month.——Prosper United has recently been inspected by a leading agent of [the] Helston district for a large shareholder, and he reports very highly of the prospects [of th]e mine, and states that the machinery is in excellent order, and working well.

[Wh]eal Hearle: A balance-sheet, showing the financial position of the mine, has [been] issued by the secretary preparatory to the meeting on the 28th inst. The ac[counts] show a monthly profit. The cost for the three months ending in March ap[pears] to be 1104*l*. 1s. 10d., and the sales of tin since December last being 20⅛ tons, [amou]nting to 1300*l*. 12s. 6d., leaving a credit balance of 988*l*. 6s. 1d. The mine is re[porte]d to be looking very well, and holding out promise of early improvement in se[veral] important places.

[...] Just United: The operations are going on satisfactorily, the mine is in fork to [...] fathoms below the deep adit, and about dropping the lift to the 16 fm. level. A [full] complement of men are actively engaged in the various works necessary to bring [the lon]g-suspended mine into an efficient state of working. From the appearance of the [g]round left standing, there is no apprehension as to the result.

[Wh]eal Sithney and Carnmeal account was held on the 14th, the meeting passed [v]ery satisfactorily. The labour costs were charged up to the end of February, the [mer]chants' bills to March 1, and the costs divided *pro rata*, amounting to 1*l*. 0s. 10d. [per] share, which is the amount of call made. The circular with particulars and agents' [repor]t has not yet been received.——Great Wheal Fortune is reported to have im[prov]ed in the 78, whilst all the other productive places are looking quite as well as [...]——Garlinda is reported to have improved in several important places, but the [produ]ctive points have not been given.——In Wendron Consols an improvement is re[porte]d to have taken place in the flat-rod or Sleeman's shaft, sinking below the 35, [whe]re the lode is valued at 20*l*. per fathom.

[Wh]eal Basset and Grylls: The lode in Wheal Fat is producing large quantities of [...] and the recent improvement at Wilkins's still holds good. A very important point [is c]oming off by the intersection of two distinct lodes at Tyack's shaft, which is being [sunk] between the two lodes; they proved very productive and rich in the old men's [wor]kings. It is intended to sink the shaft so as to leave good backs under the former [wor]ks, and then drive and cut both lodes, which is expected to be accomplished in about [...] months; and when done there is no doubt but this mine will prove one of the [grea]test in the county. The mine at present is returning upwards of 20 tons of tin per [mon]th, with efficient and powerful machinery. A 60-inch cylinder steam-engine, [stea]m-stamps of 32-in., driving 80 heads, steam-whim 18 in., two water-wheel stamps, [and] a quantity of other valuable materials. They sold on the 1st and 3d inst. 22 tons [...]ts. 2 qrs. 27 lbs. of back tin, realising 1232*l*. 14s. 7d., being the produce of April, [whi]ch will, no doubt, be augmented by future returns. This mine, considering its pre[sent] position and future prospects, is one of if not the best, for present investment.

[Tr]ewarne United Mines four-monthly meeting was held on Monday, when the [st]atement of accounts showed a balance of 1318*l*. 11s. against the mine, and a call of [...]1s. 6d. made. The agents have furnished a detailed report of the position and pro[spec]ts of the mine, which may be considered very encouraging.——Wheal Prosper [(...]ge) continues to improve daily. The engine-shaft is sunk on the tin lode, which [is ne]arly completed to the 40; this lode is paying the cost of the mine. The caunter, [or] Perth-cue lode, in the 20, is now worth 40*l*. per fathom. In the 30, on the same lode, [the] men are driving on a good branch of copper ore, which level will be under the 20 in [abou]t two months, when the 20 is expected to intersect Trewarvas main lode about the [sam]e time. There is every reason to believe that this mine will be in the Dividend [List] this year.

At Bryn Gwiog the shaft is in course of sinking below the 75 on a good lode of lead, [...] worth 4 tons per fathom. The winze sinking below the 66 is also worth 4 tons [per] fathom, and down about 5 fathoms. This winze is about 25 fathoms west of the [shaf]t, and is supposed to be the same run of ore as seen in the shaft. Should these [pro]ductive points continue good for a few fathoms longer a very valuable mine will be [...] open, and a large quantity of ground available at a small cost.——Long Rake engine-[shaft] has been resumed with a full complement of men, who have bargained to sink the [...] fathoms, with every necessary work, complete for 250*l*.; the lode is worth 1 ton per [fath]om. The 60 east is being driven on a productive lode, leaving good backs, and will [shor]tly be communicated with No. 2 winze, when the returns of lead will be doubled, [...] tons were sold last week, at 11*l*. 18s. 6d., and 20 tons in preparation for next sale, [whi]ch will meet cost.

[...]Bryntanbor is reported to be looking very encouraging. The 20 end is yielding 15 cwts. [of] lead per fathom, and the winze gone down about 5 fathoms under the adit has been [...]ined by the 20, and they are now stoping east and west of the winze on a good course [of o]re. A parcel, calculated about 20 tons, has been sold at 12*l*. 7s. per ton; this being [th]e first sale. Arrangements have been made for the immediate erection of a powerful [wh]eel, and all other necessary machinery, which can be worked by water, having the [faci]lity of a large stream, which can be applied and brought into use at a very little ex[pen]se.

James Lane.

From Mr. Edward Cooke:—An almost unprecedented amount of busi[nes]s has been done during the week, principally in the following mines—East Caradon, [W]est Caradon, Wheal Grylls, Wheal Grenville, Ludcott, East Carn Brea, New South [Car]adon, East Grylls, Tolvadden, Great South Tolgus, Wheal Seton, Tincroft, &c. East [Car]adon has now reached the enormous price of 282,000*l*. for its entirety, thus enabling [man]y of the original shareholders to realise, I may say, large fortunes on their outlay. [N]othing has conduced more towards the interest of British mining for many years than [th]e success of this mine, and it cannot fail to have a very beneficial effect on the whole [of] the Caradon district. This district is the most important in England at the present [ti]me. There is scarcely a piece of ground in the locality at all worthy of notice that has [no]t been secured for mining purposes. Having within the last week visited the Caradon [dis]trict, for the purpose of eliciting information, I am desirous of imparting the same to [m]y readers. The principal object of my visit was that of the New South Caradon. [It] is not pretended that any riches have yet been discovered, although very good indica[ti]ons have presented themselves during the past week at a shallow depth from surface. [W]hile it would be presumptious in anyone to say that this mine will ever equal its [ne]ighbours in richness, it is only fair to state that there is everything to favour the ex[pe]ctation that it will some day become a very important property. It is certainly one [of] the largest setts in the district, and, according to the best authorities, contains the [w]hole of the lodes of the South and West Caradon Mines. The formation of the New [S]outh Caradon sett is of a similar character to that of the former of the two mines named, [an]d has the great advantage of being worked with water-power, and is selling at less [th]an 6000*l*.; while more than that amount has, I believe, been expended in the opera[tio]ns that have been carried out.

West Caradon is deserving of the attention of those who have money to invest. I [be]lieve that West Caradon will yet become a good dividend property again, and will be [sell]ing in its returns. About 600 tons have been sampled for the past two months, [w]hich will leave a profit, while at the western part of the mine vigorous operations [ar]e being carried on, with the view of opening up a new mine in that direction. [A]t Wheal Grylls, on Saturday last, I found everything going on in the most satisfac[tor]y manner. Dressing-floors are being laid out in the most efficient style, and the [cal]ciner is in full operation. I believe I am right in saying that 25 tons of tin will be [so]ld during the present month, and that regular monthly sales will be made. It will [th]en be seen that Wheal Grylls will rank as one of the best tin mines in Cornwall, and [is] selling at a low price, when its splendid prospects are taken into consideration. [Wh]eal Grenville is reported to be looking well, and will, no doubt, become a good [mi]ne. Wheal Caradon, under the management of Mr. F. Pryor, with a highly re[s]pectable proprietary, is said to be showing good prospects of success. East Agar, [ad]joining West Caradon, has improved of late, and is attracting attention, owing to its [pro]ximity to that mine. Cwm Brane Lead Mine is in a prosperous state, and working [at] a profit. This is one of the cheapest mines in Wales. At last Wheal Grylls ope[rat]ions are being carried on vigorously, and when the levels and adit shall be cleared up [th]ere will be a considerable quantity of tin returned. The shares are in good request, [an]d will remunerate those who buy them in the same ratio as did Wheal Grylls. Wheal Ludcotts have been largely dealt in. The returns of silver are rather extra[or]dinary, and if the deposit of silver is found in the next level, of which there appears to [b]e no doubt. The shares will have a considerable rise.

Gold in Ireland.—It is stated that while some workmen were sinking [a] well within the bounds of the Cullycupple Bleach-green, Aghadoey, County Derry, at [th]e depth of about 12 ft. from the surface, they came upon a mineral substance of a [ye]llowish colour, mixed up with sand, and which, when tested, has been found to contain [go]ld in certain quantities.

Silver Mining in Norway.—The last advices from East Kongsberg [a]re quite as encouraging as those which preceded them. The produce of the Nenes Glück [M]ine during the last week in April was 6 lbs. of silver, nearly pure, worth, say, 98 per [c]ent.; 7 lbs. of mittelerts, containing from 12 to 50 per cent. of silver; and 8 tönde of [sch]alm or stamp ore; each tönde cantaining exactly 8 cubic feet of stuff. This produce [fro]m a mine which has only just been forked and cleared of attle and mud, may fairly [b]e regarded as promising much for the future. From the Sundse Mine the yield was [a]bout the same as usual.

Old Wheal Neptune.—This rich old copper mine, which is situate at [M]arazion, will speedily be put to work, after having been suspended for upwards of forty [y]ears. During the twelve years it was worked upwards of 400,000*l*. worth of copper [or]e was sold, though the standard at that time was but 90*l*. With copper at the present [st]andard the mine will, without any additional discoveries being made, yield large [pro]fits for some time to come. It is only 100 feet deep, and gives every indication of [in]creasing in depth. In next week's *Mining Journal* we shall publish the prospectus [of] the undertaking.

The Nant Colliery.—A local company, with a capital of 39,000*l*., in [sh]ares of 10*l*. each, and on the limited liability principle, has just been formed for purchas[in]g and working the mines of Nant Mawr, Bryn Feigas, and Plas Major, in the Tryddyn [dis]trict, Flintshire. The thickness of the three seams already proved is 20 ft.—the Main [co]al, 9 feet; the Six-feet and bind, 7 ft. 6 in.; and the Brassy coal, 3 ft. 6 in. A rich [Ca]nnel seam, which in neighbouring mines yield a coal saleable at the pits mouth at 1*l*. per [to]n, also runs through the property, and there is rich ironstone, which can be worked [no]w the iron trade is in a more prosperous condition. The colliery was abandoned from [th]e difficulty of transport, but changes having since been made, which will enable the pit to be put in direct communication with good markets by a branch with the Chester and Mold Railway.

SALES OF LEAD ORES.

The following are the returns for the quarter ending March:—

Mines.	Tons.	Amount.		
Minera	1467	£18,257	8	6
Dyliffe	746	9,216	7	0
Isle of Man Company	324	6,225	12	7
Frongoch	470	5,563	10	0
Cwmystwith	420	5,042	10	0
Wheal Mary Ann	277	4,249	9	6
Glogfach	245	3,664	0	0
East Logylas	290	3,503	15	0
Laxey	200	3,410	0	0
East Darren	212	3,219	8	0
Chiverton	171	2,604	13	6
Rhosesmor	203	2,511	6	0
Cwm Erfin	155	2,324	8	6
Dyfngwm	171	2,030	3	0
Maesyrerwddu	139½	1,805	19	3
Mount Pleasant	142	1,795	10	0
Westminster	150	1,777	10	0
Frank Mills	115	1,641	17	6
Goginan	98	1,479	14	6
Parry's Mine	100	1,238	2	6
Llanerchyraur	91	1,229	0	6
Cefn Brwyno	101	1,209	11	0
Coetia Llys	93½	1,174	10	7
Roman Gravels	90	1,110	5	0
Llanfyrnach	90	999	10	0
Bryn Gwiog	75	935	10	0
Keswick	76	910	8	0
Cargoll	63	889	17	6
North Minera	67	800	13	1
Exmouth	80	800	0	0
Penpompren	60	793	0	0
Deep Level	60	739	17	6
Rhoswydol	64	728	8	0
Newtownards	55	676	10	0
Llangynog	55	669	2	6
Llanfair	25	644	7	6
Maesysafn	50	612	10	0
Hendre Ucha	49⅛	592	4	3
Orsedd	46	583	11	0
Aberdovey	49¼	569	19	3
Holywell Level	30	418	15	0
Long Rake	30	372	7	6
Pool Park	29	353	1	6
Great Daren	20	337	0	0
Carmarthen United	27	333	9	0
Gwaith Coch	30	333	0	0
St. Pierre de Peona	65	327	2	6
Nant-y-Iago	76	291	13	0
Herward United	20	221	5	0
Brusenpiano	20	182	0	0
East Jane	14	176	1	0
Bryntail	11½	142	6	3
North Henblas	10	124	10	0
Brynford Hall	10½	123	10	6
Pant-y-Buarth	10	110	15	0
Grosvenor	6	70	19	0
Garreg	6	68	8	0
Trelogan	5	57	2	6
Lower Park	5	56	12	6
Kilmory	4	49	10	0
Lady Eleanor	3¼	43	13	9
Yralltwen	3¾	43	9	9
West Merllyn	3	37	10	0
Pwllmelyn	4	32	4	0

BLENDE.

Minera	100	£202	0	0

SALES OF BLACK TIN.

The following are the returns for the quarter ending March:—

Mines.	Tons.	Amount.		
Dolcoath	239¾	£16186	14	5
Great Wheal Fortune	106	7473	0	0
Charlestown United	98½	6323	7	7
Cook's Kitchen	73¼	5089	13	10
Great Wheal Vor	64	4582	18	1
Tincroft	66¾	4496	2	8
St. Day United	73¼	4329	11	10
Drake Walls	60½	4260	1	3
Boscean	41¼	2978	1	6
North Roskear	36¼	2823	15	2
Basset and Grylls	41½	2724	3	8
Calvadnack	29¼	1874	13	0
St. Austell Consols	25½	1697	3	0
Wheal Kitty	27¼	1665	7	6
Great Wheal Busy	23	1391	6	8
Garlidna	20¼	1349	2	10
Wheal Buller	20	1315	11	2
Stray Park	19¼	1306	5	8
North Wheal Busy	—	1300	17	6
Wendron Consols	19	1290	16	0
Ashburton United	17¾	1245	3	3
Roman Gravels	93½	1174	10	7
Trelyon	15½	1065	4	11
Penhalls	14¾	1004	5	1
Gurlyn	14¾	980	19	0
Wheal Tremayne	11¼	793	11	3
Boscaswell	12¼	749	14	6
South Carn Brea	11½	727	7	0
North Levant	9	599	16	6
Pedn-an-drea	8	514	5	8
West Seton	7½	466	18	0
Trevenen	6	410	9	6
Brea Consols	5	340	7	0
Bottle Hill	5	339	14	8
West Frances	4½	323	15	7
Cuddra	5	311	17	10
Redmoor	4	268	0	0
Treworlis	4	259	0	0
Wheal Union	2¾	181	6	6
Wheal Norris	¾	49	7	0
East Wheal Lovel	1¼	89	14	6

FOREIGN MINES.

Copiapo.—Checo: Estimated produce for March:—

		Quantity.	Ley.	Price.	Value.
First class dark ore	Qtls.	860	40	$26¾	$6206·00
Second class ditto		1056	17		
Third class ditto		540	15	10	675·00
Total	Qtls.	2396			$6881·00

In the 40, east of Price's shaft, the lode in the chiflon is split into branches, and is not so good as it has been, but expect it will improve. We shall stop the 40 cross-cut, west of Price's shaft, and remove the men to the western sett. In the 40 cross-cut, east of Price's shaft, we have the lode, but have not as yet cut through it. In the 45 chiflon the lode is 1 ft. wide, producing good stones of ore.—Western Sett: In this part of the mine we have a very good prospect. We have again holed to some of the old men's workings, down about 18 fms. under the surface; here the lode is 2 ft. wide, 1 foot of which is ore of about 15 per cent. If we can once get the water out of this part of the mine we shall soon see what it is worth, and have satisfaction—hoping that will be in a month or two.—George Matthews.

Lusitanian.—May 5: Palhal Mine—Basto's Lode: The lode in the 50, west of Taylor's shaft, is 3 ft. wide, composed of quartz, flookan, and stones of ore. In the 50, west of the Slide lode, there is a branch 6 in. wide, but unproductive. In the 38, west of Taylor's shaft, the lode is 3 ft. wide, a great proportion of which is flookan, with quartz and stones of ore. The lode in the 28, west of the Slide lode, is 15 inches wide, worth 1 ton of ore per fm. In the 18, west of Abel's winze, west of the Slide lode, the lode is 6 in. wide, composed of quartz and small stones of ore. In the 8, west of Perez shaft, the lode is worth 1 ton per fm. The lode in the adit, west of Perez' shaft, is worth 1 ton per fm. The lode in Perez shaft, below the 8, is split into branches, and without ore to value. The lode in the stopes No. 1, above the 50, west of Ernesto's winze, is worth 1½ ton per fm. In the stopes No. 2, above the 38, west of Clondino's winze, the lode is worth 1 ton per fm. In the stopes No. 3, above the adit level, west of stopes No. 9, the lode is worth 1 ton per fm. In the stopes No. 4, above the 38, west of the stopes No. 2, the lode is worth 1 ton per fm. In the stopes No. 6, above the 50, east of Jackson's winze, the lode is worth 1½ ton per fm. The lode in the stopes No. 9, above the adit level, west of Perez shaft, is worth 1¼ ton per fm. In the stopes No. 12, above the 60, the lode is worth 2 tons per fm. In the stopes No. 8, above the 60, east of Ball's winze, the lode is worth 2½ tons per fathom. In the stopes No. 5, above the 50, east of Valente's winze, the lode is worth 1 ton per fm.—Mill Lode: The lode in the 38, east of Taylor's engine-shaft, is worth 1 ton per fm. In the 20, east of the Slide lode, the lode is 1 ft. wide, composed of flookan and quartz, with stones of ore. The lode in the stopes No. 5, above the 38, west of Roderigue's winze, has become poor, and the men have been removed to sink a winze below the 38, a little to the east of Roderigue's winze, where the lode is 2 ft. wide, and worth 1 ton per fm. In the stopes No. 10, above the 18, west of Dea's winze, the lode is worth ½ ton per fm. In the stopes No. 11, above the 38, west of the caunter lode, the lode is worth 1¼ ton per fm. In the stopes No. 14, above the 50, west of River shaft, the lode is worth 1 ton per fm.—House Lode: The lode in the 40, west of Oak shaft, is 15 in. wide, composed of flookan and stones of lead.—Great Caunter Lode: The lode in the 30, west of Oak shaft, is worth 1½ ton per fathom of lead and copper mixed. The lode in the winze below the 20 is worth 1 ton per fm. The lode in the stopes No. 13, above the 10, west of the old shaft, is worth 1½ ton per fm.—Slide Lode: The lode in the 28, west of the Mill lode, is 3½ ft. wide, composed of flookan.—Carvalhal Mine: The lode in the incline shaft, below the 10, is 2 feet wide, composed of quartz and good stones of lead.

Pontgibaud.—The following are extracts from the report, dated April 3:—Roure: The stollen, south of Agnes shaft, has improved in appearance, and orey for the whole width of the level. The lode in the adit level, south of the same shaft, is producing the same as last reported. The 20 metre level south produces 1½ ton of ore per fm. The 40 metre level south is producing 1 ton of ore per fm. The 60 metre level south has entered the run of ground driven in the level above; the lode is now worth 1½ ton per fathom. The 60 north is still unproductive. Our stopes yield well. Our tribute pitches are not looking quite so well.—Rosier: In the 120 metre level, north and south of the little shaft, the lode is producing some saving work. The 85 metre level, south of same shaft, on the Grandmarchpied lode, produces 1 ton per fm. The pitches on this mine have rather fallen off in value.—Mioche: The adit level south of Taylor's shaft, on the 7th lode, has intersected Nosky's lode; we have put men to drive east on it, producing some ore. The 80 metre level, north of Taylor's shaft, on No. 3 lode, is worth ½ ton of ore per fm. The same level north, on No. 2 lode, is worth ¾ ton per fathom, and has a promising appearance.—La Grange: The adit level, north of cross-cut west, is looking more promising than it has for some metres, and letting out much water. The 20 metre level, above the adit south, is worth ½ ton of ore per fm. The stopes in this mine are looking well.—Pranal: The lode in the 8 metre level north, on side lode, continues good, producing ½ ton per fathom. The 30 metre level, north of Geille's winze, on the same lode, produces 1¼ ton of ore per fathom. The lode in the 70 metre level north is producing good saving work for lead, intermixed with pyrites and blende. We have holed the winze sinking from the 70 to the 90 metre level, south of Bontoux shaft, and shall at once resume the driving of the cross-cut in the 90 metre level to cut the Amantine lode. Our stopes in this mine are yielding about their usual quantities of stuff. In the tribute department there is no particular alteration.—Barbecot: The stope north of Leontine's shaft, in the back of the 35, is producing ¾ ton of ore per fathom. All our surface works are going on well. The samplings have amounted for the month to 238 tons.

Central American.—March 29: We are glad to inform you that a large amount of work has been done throughout the mines during the present month. In San Pantaleon, Cornubia engine-shaft has been sunk 3 fms. 4 ft., by three Englishmen and six natives, at 20*l*. per fathom, where the lode continues large, being 5 ft. wide, with a little good silver ore; and, from its congenial appearance, we are expecting an improvement in the vein daily. Six men have sunk Taylor's engine-shaft 3¾ varas, at $45 per vara. The lode is still very small and unproductive.—San Hilario: The lode in Lara's stope, from the back of this level, is about 15 in. wide, and producing from 3 to 4 cwts. of good silver ore per fathom, and has a most promising appearance. In No. 6 stope, from the back of San Damasio level, the lode is 18 in. wide, and worth 4 cwts. of rich silver ore per fm.—Dolores: During the present month a new winze has been commenced from this level, called No. 3, east of No. 2 cross-course, where six men have sunk 4½ varas, at 8*l*. per vara; here a good lode is going down which is 20 in. wide, and worth from 9 to 10 cwts. of second-class ore per fm.—San Juan, or the 10 fm. level under Dolores: This end has been driven east by six men 16¼ varas, at $9½ per vara. For the whole of the above distance the lode has been very productive, at times being worth as much as 30 cwts. of rich silver ore per fm. In the present end the vein is about 15 in. wide, and worth 7 cwts. of good ore per fm. The lode in No. 1 stope, from the back of this level, east of the cross-course, is 1 ft. wide, producing from 3 to 4 cwts. of good silver ore per fm. In No. 2 stope, from the back of the same level, the lode is 2½ ft. wide, at present rather poor. The lode in No. 3 stope, from back of same level is about 2 ft. wide, and has produced a large amount of rich ore this month, and is still looking well, worth worth from 6 to 7 cwts. of good silver ore per fathom. Another new winze has been commenced from this level, called Fajardo's, which is situated wes of Lemu's winze, and about 30 fms. east from Taylor's engine-shaft; here six men have sunk 9¼ varas, at $7 per vara, on the course of the lode, which is 20 in. wide, but without ore of value.—San Ricardo, or the 20 fm. level under Dolores: After driving the end east from Cornubia engine-shaft 6 varas further, the cross-course No. 2, Dolore's level was reached, since which the men have driven north 9¼ varas, towards the heaved portion of the main lode; this we hope to cut in six or seven weeks. The San Ricardo level, driving west from Cornubia shaft, has been driven 20 varas by six men; 4 varas at $8, and 16 varas at $1½ per vara. The lode in this end is 20 in. wide, composed of gossan, calc-spar, and flookan, with mundic, and has a promising appearance.—San Alfonso Deep Adit: This level has been advanced east during the month 5½ varas by six men; 4 varas at $23, and 1½ vara at $26 per vara; the ground here is very hard.—San Antonio Mine: We have been busily engaged for the last four weeks in dividing and casing Ellery's shaft; this work we hope will be concluded in the course of next month, when we shall be enabled to commence stoping the ore ground already laid open, and drawing with the new horse-whim. The old adit, or San Luis level, has been driven by four men east 9¼ varas, at $8 per vara. The lode in this end is 1 ft. wide, composed of gossan, spar, and flookan, mixed with a little silver ore of good ley. The winze sinking from this level has been sunk by four men 6¾ varas, at $14 per vara; here the lode is rather small, being about 8 in. wide, composed of decomposed mundic, with blende and silver ore, and is turning out about 3 cwts. of good quality broza per fathom.

April 2.—I am glad to refer to the increased returns of ore from the mine of San Pantaleon. These amount to upwards of 100 tons, including 12½ tons of first-class ore, assaying 300 ozs. The ore ground in San Pantaleon maintains its productiveness, and San Juan level east has been driven 16¼ varas on a very fine lode. From the point at which the bunch of ore was discovered, referred to in my last report, the lode has continued rich up to the present end. The indications are flattering indeed, for not only opening up a rich extension of stoping ground to the eastward, unknown in the levels above, but at the same time making the discovery of this course of ore in the San Ricardo level almost a matter of certainty. We hope to cut the heaved lode in this level in about six weeks. The reduction operations at the hacienda San Jose have been carried on successfully. The quantity of poor ores reduced during March was 171 tons. Eighteen bars of silver were sent to the Mint of Guatumala on Feb. 26, and realised $15,761. A similar quantity will be sent in April. The total quantity of ore raised in March was 102 tons, of an average assay of 150 ozs. per ton.—Note: 379 bags of silver ore have arrived at Liverpool; 103 bags at Southampton, and 66 bags more advised as shipped.

Clarendon Consols.—J. Martin, April 21: Stamford Hill: The engine-shaft has been sunk about 4 fms. below the 94. The lode in the south-west end of the shaft is composed of red flookan, and at times spots of ore; the lode in the east end of the shaft is broken up by a cross-course. The lode in the stopes in the bottom of the 82 is worth ½ ton per fm. The lode in the 82 south-west is about 3 ft. wide, and composed of killas and mundic. We have about 16 fathoms to drive in this end to get under where we have the ore in the 70: no time shall be lost in pushing on this driving. The men are now engaged in cutting out the south-east part of the lode in the 70; we have cut into it to date about 4 feet, and find it to be composed of ore and porphyry, with carbonate of lime and quartz; the south part looks as if it had been a separate lode from the north. The north is about 3 ft. wide, composed of gossan and veins of yellow ore, prian, and peach, and letting out a large stream of water. We have driven about 3 fms. since we cut the ore, and the lode appears to have as much ore as when first cut. Of the lode in the winze sinking in the bottom of the 46 we have about 4 ft. in the winze, and no north wall; the part we are carrying is composed of green carbonate and gossan, prian, and at times yellow ore, similar to the yellow ore we have at the 70. We have a little water in the winze, which, if it does not decrease, will enable us to sink with speed, and thereby ventilate the 70. This work should be pushed on with vigour.

Coal Tar Colours.—To the mining community every fresh application of mineral products to industrial purposes must be of considerable interest, as it cannot be denied that the tendency of all such movements is to augment the profits of mine adventurers, and increase the confidence of capitalists in mining enterprise. Some few weeks since we referred to a new manganese dye, but as yet the discovery can scarcely be regarded as perfect, and coal tar colours are still the most attractive. During the past week Prof. J. H. Pepper, F.C.S., has superseded his lecture at the Polytechnic Institution on Accidents in Coal Mines by another also indirectly connected with collieries—On Colour in general, and Coal Tar Colours in particular. He treats the subject in his usual lucid style, and the lecture is copiously illustrated by chemical and optical experiments. To meet the requirements of the numerous visitors to the International Exhibition, the entire entertainments of the institution have been changed, and the Polytechnic cannot fail to be, as it has ever been, one of the greatest attractions to foreigners. Mr. J. L. King delivers an instructive lecture on the Curiosities of Science, and amongst the other amusements are charming musical entertainments by the Brousil family; an optical extravaganza by Mr. Buckland, and a large series of entirely new dissolving views. The mechanical models, the whole of which are constantly at work, have been considerably increased, and the large geological section of the earth's crust continues to attract the attention of all connected with our mineral industries.

Utilisation of Blast-Furnace Gases.—An invention for improvements in treating gas produced by blast-furnaces in its passage from the blast-furnaces to other furnaces, or heating apparatus, has been provisionally specified by Mr. John Vaughan, of Middlesborough-on-Tees. The principal feature in the invention consists in the employment of a jet of steam in connection with a regular supply of water. He proposes that jets of steam shall be so situated as to increase the draft and accelerate the passage of the gas through tubes conveying it, thereby relieving the furnace to a considerable extent from forcing the gas into the purifier. When the gas comes under the action of the jets of steam, the coarser particles of the dust and other matter with which the gas is mechanically mixed are propelled under water; the gas also is forced under water partly, but immediately rises, and leaves all impurities behind. The water is to be kept constantly in circulation through a reservoir, which receives the deposit from the gas and carries it away. The water contained in this reservoir also condenses the steam from the jets, and prevents it from rising with the purified gas. In order completely to condense the steam from the jet or jets before the purified gas reaches its ultimate destination, the gas is caused to pass through a stratum of coke, open brickwork, or other porous material, through which a stream of coal water in constantly kept running; this stream of water also supplies the reservoir, and if it is desired to purify the gas still further this stream may hold in solution lime, or other purifying materials. The stream in condensing carries off all the finer particles of dust from the gas, as well as other deleterious matter blown with it from the furnace.

New Motive-Power Engine.—Messrs. Dowell, of Rhyl, have provisionally specified an invention which consists of a wheel having an even number of spokes, each diametrically opposite to another. Weights carried by the said spokes are worked in such a manner that those on the falling side of the wheel are always at a greater distance from the centre than those on the rising side; one-half of the wheel is thus kept in a constant state of preponderance, and the said wheel constantly rotates. On each spoke there is a sliding weight, and a rod prolonged beyond the periphery of the wheel carries a second weight. On the spoke, somewhat further from the axis of the wheel than the inner weight, is a centre on which two crossing levers work, the shorter arms of the said levers being towards the inner weight, and connected therewith by connecting links and a rod. The longer arms of the said levers are also connected therewith by a connecting rod, with a similar pair of crossing levers turning upon a centre on the spoke, and near the periphery of the wheel; and to the latter levers the rod carrying the outer weight is connected by connecting links. The action of the levers described somewhat resembles that of the ordinary lazy tongs levers. The drawing upwards of the outer weight is thus effected by the inner weight changing positions with it, and hence the constant motion of the wheel is kept up.

Indurating Stone.—Messrs. Coombe and Wright, of New Bridge-street, Blackfriars, have patented an invention which consists in saturating bricks, tiles, slabs, artificial stones and marbles, or such portion of them as are exposed to the action of the atmosphere, with hydro-fluo-silicic acid and silicate of potash. The invention is alike applicable to limestones and sandstones. The claim is for using silicate of potash, in combination of hydro-fluo-silicic acid or hydro-fluoric acid.

Mining Correspondence.

BRITISH MINES.

ABERDOVEY.—A. Ede: I expect a change very shortly in the main lode, north of engine-shaft, at the 42, as it is now running very regular, and underlying about 2 feet per fathom, the ground being composed of a soft clay-slate; the end is driving by six men with all speed. The stope south of engine-shaft is producing about ¾ ton per fm., and all other places of operation are without change. We have a large quantity of ore broken, which we are dressing as quickly as possible, but are rather short of surface hands.

ALFRED CONSOLS.—S. Thomas, T. Hosking, May 14: In the 160, driving east of Davey's engine-shaft, we occasionally meet with stones of ore. In the 150, east of the above shaft, the lode is worth 6l. per fathom. The stope in the back of the said level is worth 10l. per fathom. The 140, east from the cross-cut, on the north lode, is worth 3l. per fathom. In the 140 cross-cut north we have not as yet intersected the lode.

BAGTOR.—W. Hosking, May 14: The Quickbeam lode has improved since my last; it is now 4 ft. in width, producing good work for tin throughout. We have here four men driving on the course of the lode, and the continuously increasing depth will afford a considerable back of tin ground for stoping by the time of completion of the stamping machinery. The four men driving on Prosper lode are also making good progress, and the produce is yielding work for the stamps; the lode is 3½ ft. wide, and promising considerable improvement as we approach the old men's workings further west. We have a full staff of men employed in sinking the wheel-pit, and bringing up to the tail rail. The ground is favourable, and thus we shall shortly be able to put the masons to work. In excavating the ground for the wheel-pit we have intersected another very promising and even now productive lode, which by-and-bye we shall open on. The buildings are going forward as fast as the work can be accomplished, and other hands are engaged levelling and clearing ground for the dressing-floors. The castings for the 60-ft. wheel are complete at the factory, and will be delivered at Totnes in a few days; and should the present fine weather continue we shall have the machinery and surface works in a very advanced state by an early date.

BOTTLE HILL.—J. Eddy, May 13: South Lode: We are now down about 5 fms. below the adit level. The lode in the bottom of the shaft is disordered by a cross branch. No improvement in the lode since last week. I think it desirable to drive a little on the course of the lode both east and west at this depth before the general meeting.—Robert's Lode: The south branch in the 17 is without alteration; the lode in the present end still continues to hold its size, and producing good saving work. The tribute pitches, on the main lode, are without alteration. I sent off samples on Friday last, computed 5 tons. Mr. Croker, when on the mine yesterday, informed me the offers for the parcel of tin would be received to-day. We have had a better supply of water this last week by night, but still very short by day.

BREA CONSOLS.—C. T. Craise, May 9: Trevesa engine-shaft is sunk 9 fms. 5 feet 6 in. below the 40; the ground continues much the same for sinking; set to six men, at 21l. per fm. The 40 cross-cut south, towards Thomas's lode, has been driven 2 fms. 2 ft. during the past month, leaving about 4 fms. to intersect Thomas's lode; set to four men, at 8l. 10s. per fm. We have commenced clearing a winze below the 30, on this lode, to ventilate the 40, mentioned above, by two men and one boy, at 10s. per fm. The 40 east, on Red lode, has been driven 2 fms. 1 ft.; lode 3 ft. wide, producing stones of copper ore and tin, but not of much value; driving by six men, at 11l. 10s. per fm. The Redwork shaft is sunk 2 fms. 3 feet 6 in. below the 30; the lode is the usual size, producing tinstuff. The stopes in back of the 20, for the purpose of communicating the Redwork shaft with the 20, is being worked by two men, at 6l. per fm.; lode 3 ft. wide, producing tinstuff. The carbona continues much the same as last reported; working by twelve men, at 7s. 6d. in 1l. The 20 west, on the Gilgin's lode, has not yet intersected the old workings, but we daily expect to do so; driving by four men, at 10l. per fm. The 20 cross-cut, south of Mathew's shaft, is suspended at present, and the men put to drive west on the lode we discovered in driving last month; at present it is very unproductive. In driving the 40 west, on Mathew's lode, we intersected a course of tin, about 6 feet long, worth 20l. per fm., which is gone above and below the level; cost of working the ground about it 4l. per fm.; labour cost, 290l. The sale of tin will be about 4¾ tons.

BRONFLOYD UNITED.—J. Lester, May 14: There is no alteration in the character of the lode in the 40, west of winze, since my last; nor in the north portion of the lode taking down after the end. We have set a bargain to four men to drive a cross-cut north from the 17 at the place pointed out upon the plan at the meeting, to get the run of the ore below. I intend putting men to open upon the same lode about 200 fms. east in the cross-cut adit level. We have begun to make preparations for the drawing-machine, and also to finish walls for second crushing-mill house. The dressing proceeds very satisfactorily.

BRYNAMBOR.—E. Williams, May 13: The 20 east has been driven east of cross-cut 21 ft., and in a very promising lode, but I beg to inform you that it has not been looking so well for the last two days; however, I expect an improvement every day. The end will yield at present 15 cwts. of ore per fm. The stopes east and west of the winze are looking well still, and, in fact, improving every inch as we are going down. I beg to inform you that the branches of ore are dipping eastward, and that is the reason, I believe, that the 20 east has not yet reached the great body of ore; however, I expect that it will do so in a few days. As regards making a resevoir, after a careful examination of the ground I am of opinion that it would be better at once to bring the River Pescotta to the mine, at an outlay of 14l., and then we shall have sufficient water all the year round, and as we must do this sometime or other, the sooner will be the better; the length of the water-course will be about 165 perches. We are pushing on as fast as possible with the dressing, and the ore sold shall be sent off this week. We have four men driving the 20 east; six stoping east and west of winze; seven drawing stuff; two carpenters and smiths; three girls and two boys on the floors.

CAMBORNE CONSOLS.—William Roberts, May 14: In the 50, driving east on the caunter, the lode is about 1 ft. wide, producing stones of ore. In the 33 west, on the north lode, the lode is 2 ft. wide, composed of spar, mundic, and gossan. In the other bargains there is no alteration to notice since last reported.

CARADON CONSOLS.—Wm. Rich, May 13: There has been nothing new met with during the past week in the 68 south; we are, however, forcing on the end by six men, in favourable ground; I calculate there are about 5 fms. further to reach the main lode. In the north cross-cut the ground is rather stiff at present, but I think it will soon change for the better. We expect to intersect a lode in this cross-cut in about 2 or 3 fms. further driving. The engine lode, in the 68 east, is looking very promising, and shows more ore than of late, which is intermixed with as kindly fluor-spar and peach as can be seen; the walls also are nearly perpendicular. The Menadue lode appears to have made a splice, but it is again getting larger as we extend east. In the 54 west this lode is full 2 ft. wide, and carries good spots of native copper. We have a hard bar of ground in the end, which makes the progress slow.

CARDIGAN CONSOLS.—J. Sanders, May 12: The lode in the adit east, on copper lode, is at present worth 35l. per fm.; the stope in back of the same is worth 25l. per fathom. We have commenced to sink the shaft below the adit, which will be pushed down to open out the ground at a deeper level as fast as possible.

CARN CAMBORNE.—W. Bishop, May 13: There is no change to notice in any part of the mine since last reported on. We shall sample at the usual time about the same quantity of ore as the last, but we think it is of much better quality.

CASTLEWARD.—R. Tabb, May 12: The ground in the bottom of the engine-shaft continues tolerably favourable for sinking; there is now a small vein in the shaft, which is composed of quartz, iron pyrites, spots of lead and clay, or flookan. The stope south-east, in back of the 20, is poor at present, but in a day or two we shall be in better ground. The stope west of ditto will yield from 12 to 14 cwts. of lead ore per fm., with a prospect of continuing for several fathoms both in height and length.—Surface Work: The dressing is going on well, but in order to dispatch the work more hands must be employed. Crushed ore weighed into the store-house 12 tons 5 cwts. 2 qrs. Cobbled ore weighed into bing 2 tons 4 cwts. 1 qr., and we have about 5 or 6 tons in a forward state of dressing. The carpenter is now employed in making and fixing launders and staces, and making buddles for the fine lead ore.

CEFN CILCEN.—C. J. Williams, May 15: The engine-shaft is progressing favourably, and will be completed down to the 96 yard level early next week, when we shall commence to raise ore in the trench 14 yards long, worth 12l. per fathom. The 82 yard level, driving west of engine-shaft, continues to look well, worth from 3 to 4 tons of ore per fm. in the bottom part of the end, and has all the appearance of long continuance, and as soon as we shall have ventilation from the Gurysaney shaft we shall put more men to stope away the back and bottoms. The 35 yard cross-cut south is without any alteration since my last. In the 45 yard cross-cut, south from the caunter lode, we have intersected the main lode, which has a favourable character; the lode is 2 ft. wide, composed of spar, clay, carbonate of lime, and good stones of lead ore. The 45 yard level, driving north-west on the caunter lode, is without any change since last reported on. The dressing operations are going on satisfactorily. No other alteration of importance hroughout the mine.

CENTRAL MINERA.—W. Davies, May 15: We have continued the driving of the great north cross since we intersected the vein, but have not yet reached the north side; the end is at present hard for driving. We have driven about 10 ft. through the vein, which is composed of chert, spar, and shale, and looks very promising for lead. There is no alteration in the 40 yard level, driving west from Pugh's shaft.

CLARA UNITED.—J. Lester, May 14: There is no alteration in the lode in the 20, east of boundary shaft, or in stopes in back of the 32, since my last. We have put rods to the wheel to pump out water from Quarry shaft, and hope to have it in fork in about nine days, when we shall set a cross-cut north to cut Quarry lode.

CROOKHAVEN.—W. Tonkin, May 10: The men have commenced to sink the engine-shaft under the 60, and have a great quantity of water in sinking, which is a good feature, and tells well for the lode near at hand; an abundance of water from a lode indicates an abundance of mineral. I have set to cut a plat in the north cross-cut at the 40, 8 feet by 4, and to sink 1 fathom 6 feet by 4, for 11l.; this is for the purpose of ventilation, which is much needed. I thought to have sunk on the gossan lode, but in clearing a place to sink I find the ground too expensive to sink on.

CUDDRA.—F. Puckey, E. Dunstan, May 15: In the 100 south, west of Tickell's shaft, we are still driving south, but have not yet reached the lode; the ground is spare for progress. In the winze sinking below the 60, west of Walker's shaft, the lode is still large, containing good work for tin. Walker's shaft is down to the 75, and we have commenced to drive east and west in killas under the lode; we shall take down the lode in this level next week, when we shall be able to report its value.

CWMBRANE.—May 15: The ground in the 20, on the new lode, is more spare for driving, the lode being 1 ft. wide, and producing ½ ton of lead per fm. The 10 north, on Red lode, will produce about 1 ton of lead per fathom. We are getting on very well with the new shaft, and shall complete it to the 10 this month. It is of great importance to get this shaft to the 30 as quickly as possible, so that we may be enabled to sink below on the course of the lode, where we may expect large returns of ore, looking at the amount of ground taken away from the backs.

DEVON AND CORNWALL.—T. Neill, May 13: There is no alteration to notice since last report. The mine continues to open out well.

DEVON NEW COPPER.—P. Hawke, May 14: In driving the end to the east of shaft at the 88, on the course of the leader, we have discovered underneath the killas, on the face of the lode, a vugh or hollow crevice, in which a shovel and hilt for the whole of its length may be forced; a large stream of water issues very rapidly from this point, which appears to drain to a great extent every other part of this level. I have forwarded a sample obtained from the leader part at this point. The leader going east is increasing in size, being already over 20 in. wide, comprising mundic and quartz, mixed with yellow copper ore; it has a beautiful appearance. We have driven further into the mineralised course recently met with in the cross-cut to the west of shaft, at the 88, and I am almost inclined to think from the composition of the stuff that it is a portion of the capels that have accompanied the lode, and now diverged from the latter; we shall, however, prosecute the cross-cut a little further, to solve the question. The sample of gossan forwarded is from a new lode discovered in making the wheel-pit; the lode is almost vertical, and promises on its getting settled to be a north underlie; if so, the junction cannot be any great depth below the present sink on the great north lode—a feature the most important in connection with this mining property. In a few days the underlie of the new lode may be taken, and the point of junction ascertained.

DRAKE WALLS.—T. Gregory, May 15: The branches in the 102, east of Matthews's shaft, are worth 10l. per fm.; we have met with another bar of capel in this end, which is letting down an increase of water. The branches in the 80, west of Betteley's shaft, are producing tin to the value of 10l. per fm., with occasional stones of copper ore. In the 50, west of Brenton's shaft, the branches have improved, and will produce 15l. worth of tin per fathom. No other change.

EAGLEBROOK.—H. Tyack, May 8: We have now clean from 16 to 17 tons of lead ore. By the end of this week we shall finish stoping the orey ground in back of the 20, east and west of the winze; we have a quantity of orey stuff broken in this place, which we shall draw to surface and get dressed with all possible speed. I have nothing new to communicate to you as regards the cross-cut and the 20 west.

EAST CARN BREA.—T. Glanville, J. Scholar, May 14: In consequence of the accident to the engine, the only level we have to report on to-day to value is the 40, east of the cross-cut, which will produce 4 tons of ore per fm. We hope to have the water out for the men to work by Monday.

EAST DELABOLE SLATE AND SLAB.—N. Ennor, May 15: At your request I visited this quarry, where I found your men opening a quarry about 200 feet in length and 60 feet wide. I am bound to state that this piece of rock is opening out well, and even beyond my expectation; bunches of slate are found that would be marketable at a fair depth. If this piece of rock should bear out present appearances you will have a quarry that you can work to any extent, independent of your tidal quarry. Under these circumstances I should recommend carrying down the eastern half 50 feet deeper. In conclusion, I have to remark that from present appearances you are likely to find a lasting quarry in this hill above sea level.

EAST DEVON GREAT CONSOLS.—T. Richards, May 13: We have not yet reached the lead lode in the 40; the ground continues favourable for progress and mineral.

EAST GUNNIS LAKE AND SOUTH BEDFORD.—J. Phillips, May 15: The lode in the 46, east of engine-shaft, is 4 ft. wide, and worth 1½ ton of ore per fm. The lode in the 46, east of No. 3 winze, is 5 ft. wide, producing saving work, with every appearance of improvement. The lode in the 36 east is worth 4 tons of ore per fm. No. 4 winze, in the bottom of this level, is worth 3 tons of ore per fm. The lode in the shallow adit, east of Gard's shaft, is 2 ft. wide, composed of mundic, prian, and good stones of ore—a kindly lode. The rise in the back of the 16 is worth 2 tons of ore per fm.

EAST TOLGUS.—May 14: Redruth Consols Lode: In John's shaft, sinking below the 70, the lode is 18 inches wide, composed of spar, jack, peach, and spots of ore, with scarcely any underlie. In the 70 west the lode is 1 foot wide, composed of spar and killas. The lode in the 70 east is 2 feet wide, composed of spar, peach, and good stones of ore—a kindly lode. In the 57 east the lode is 10 inches wide, composed of spar and spots of ore. In the 34 east the lode is 8 inches wide, composed chiefly of spar. The stope in the back of the 22 is worth for tin and copper 6l. per fm. The ground in the adit cross-cut, south from the new shaft, is moderately easy.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, May 14: The lode in the engine-shaft, sinking below the 45, is at present small, although producing good stones of tin. In the 45 east we are not yet through the cross-course, although the lode is producing good ore; and looking at the appearance of the 35, we do really think that the chance of meeting with an improvement here is very great. The lode in the 45 west is 4 feet wide, producing some splendid work for tin, worth full 15l. per fm. The lode in the 35 east is from 3 to 4 feet wide, composed of gossan, quartz, and prian, yielding tin and ore worth 6l. per fm. The stope above this level is worth full 5l. per fm. The lode in the winze sinking below the 35 is 2 feet wide, producing ore and tin worth 6l. per fm. We are getting on as fast as possible with the stamps.

EAST WHEAL MARTHA.—J. Richards, May 15: The lode in the adit level, driving east of the engine-shaft, is 6 ft. wide, composed of first-rate gossan, quartz, mundic, &c., and is a very fine lode indeed.

EAST WHEAL RUSSELL.—J. Goldsworthy, May 14: Homersham's Shaft: In the 120 east the lode is 1 ft. wide, composed of flookan, quartz, &c., yielding stones of yellow copper ore. In the 110 east the ground in the cross-cut south has become easier for progress. In Frewin's cross-cut, in the 110 north, the lode is composed of capel, quartz, prian, iron, and yielding a little grey copper ore—a kindly lode as far as cut into. The lode in the 100 east is 4 ft. wide, composed of capel, quartz, and yielding a little ore. The lode in the 100, on the north part of it, east of Vigar's No. 2 rise, will produce 1 ton of ore per fm. The stope in the back of the 100, on the north part of the lode, is set on tribute, at 1s. 6d. in 1l. In the rise in the back of the 88 the lode is 1 ft. wide, yielding a little copper ore. In the rise in the back of the 66 the lode is 5 ft. wide, composed of capel, peach, prian, mundic, &c. There is no change in the 88, west of Hitchins's shaft, since last reported on.

FURZE HILL WOOD.—T. Gregory, May 14: The lode in the 20, west of engine-shaft, is rather improved since we passed through the cross-course, and the indications are in favour of a further improvement. The 20 fm. level cross-cut north is extended 19½ fms.; we have to-day cut a small tinny branch, and the water increasing. The 20 fm. level cross-cut south is extended 20 fms.; the ground is very favourable, and we are driving at the rate of 2½ fms. a week; we are daily expecting to reach the south lode.

GARREG.—Wm. Sandoe, May 14: The lode in the 20, west of new shaft, is rather small, and at present unproductive for lead ore. The stope (No. 1) in the back of the 20 has slightly improved during the past fortnight, and is now producing some fine lumps of lead ore, calamine, &c., and looks very promising. I have put the stopemen on the north lode to drive the end west for a time, to see if any change takes place in the lode.

GAWTON.—G. Rowe, May 10: We have taken down a portion of the south part of the lode in the 36 west, about 3 fms. in length, and find it still continuing to look well, yielding on an average about 2½ tons of ore per fm.; there remains a considerable portion of the lode still standing to the south, which we purpose to lay open as soon as the nature of the work will admit; the ground in the end is favourable for driving, and good progress is being made. We still continue to clear stuff from the 50 west as fast as possible with our present appliances. The tribute department is much the same as for some time past, yielding fair quantities of ore, and the men getting fair wages.

GOGINAN.—May 13: The lode in the 100, east of Gilbertson's shaft, is 3 ft. wide, containing a little spar, blende, &c., and likely to improve shortly. The lode in the pitch over this level, 50 fathoms east of Taylor's, is 4 ft. wide, worth 8 cwts. of ore per fathom. The pitch over the same level, 60 fathoms east of shaft, yields 10 cwts. of ore a fathom. The lode in the pitch over the 90, 20 fathoms east of Francis's shaft, yields 12 cwts. of ore a fathom. The lode in the pitch over the 80 fm. level, 10 fathoms east of Taylor's shaft, yields 12 cwts. of ore per fathom. The pitch over the same level, 10 fathoms east of Gilbertson's shaft, yields 6 cwts. per fathom. The lode in the tribute pitch, in back of the 12, below the 60, east of the winze, produces 9 cwts. of ore per fathom. The lode in the pitch over the 60 fm. level, 10 fms. east of Gilbertson's, yields 10 cwts. of ore a fathom. The lode in the 80, west of Bryn Pica shaft, is 3 to 4 feet wide; a strong and kindly lode of spar, clay-slate, and spots of lead ore, but not sufficient to value. Good progress is being made at this point.

GREAT BRIGAN.—T. Trelease, G. Oates, May 10: In the past week the sumpmen have finished cutting bearer holes, and put in the bearers, and now engaged in cutting ground for cistern and the plunger-head; with regard to clearing the different levels, we are getting on very well. At the eastern engine-shaft we are now engaged cutting plat at the 32, and when completed we shall at once commence sinking the shaft without delay.—North Treskerby Lode: At the deep adit level, driving west of adit shaft, the lode is without change to notice. In driving east of said shaft the lode is 2 ft. wide, with spots of ore, with a kindly appearance; the lode in this level, at the whim-shaft, has been cut through: it is from 2 to 3 ft. wide, producing a little ore, but not of much value, with a very promising appearance. No other change to notice since our last.

GREAT NORTH DOWNS.—T. Trelease, May 10: Setting Report: Yesterday being our tutwork and tribute settting, I beg to hand you particulars of same. The engine-shaft to clear below the 35, by eight men, as deep as the 40, at 7l. per fm.; after reaching that part, which we hope to do in about a fortnight from this time, we purpose fixing our first plunger-lift; also the 20 to clear west of Pendarve's, by three men, at 3s. per fathom. A cross-cut to clear south of the said shaft, at the above level, by four men, at 4s. per fm. The 15 to clear west of said shaft, by two men, at 3s. 6d. per fm. Lord's west shaft to clear below the 20, by three men, at 14s. per fm. The 20 to clear east of Job's shaft, on New Brigan lode, by four men, at 9s. per fm. Bawden's shaft to clear below the surface, by three men, to hole, at 12s. per fm. Morcom's shaft to clear below the 20, by three men, at 14s. per fm. The 10 to clear west of the above shaft, by two men, at 6s. per fm. A cross-cut to drive north of said shaft, on the cross-course, to intersect the tin, by two men and one boy, at 90s. per fm. We have also set fifteen pitches on the various lodes, to 32 men, at 13s. 4d. in 1l.

GREAT RETALLACK.—W. H. Reynolds, May 13: We have holed the rise in back of the 53 to the 45, and the men have resumed driving the 53 east again; the lode contains good stones of copper, with some lead. The plunger is fixed at the 53, and we shall resume sinking in three or four days. Nothing new in the 53 west since my last.

GREAT SOUTH TOLGUS.—J. Daw, May 14: Friday last was setting-day. The lode in Lyle's shaft is 6 ft. wide, worth from 40l. to 60l. per fm. for tin; set to 12 men, at 26l. per fm., and to cut the plat. The lode in the 140 east is 5 ft. wide, worth 70l. or 80l. per fm. for tin; set to six men, at 8l. 10s. per fm. We taken down a part of the lode in the 140 west; it is 4 ft. wide, producing good work for tin; this end we cannot drive until the shaft is sunk deeper, and the pitwork fixed. The lode in the 100 west is 1 ft. wide, worth 5l. per fm. for copper; set to two men, at 2l. 15s. per fm.

GREAT TREGUNE CONSOLS.—W. Richards, May 15: The lode in Hobler's shaft is 4½ feet wide, containing capel, quartz, peach, mundic, and a little copper ore; the leader on the footwall is 8 inches wide, and looking promising; there is every probability of an improvement as we descend. The lode in the stopes, in the back of the 80, continues to yield good work for the dressing-floors. The 80 west is suspended for the time, and two of the men are put to prepare to sink a winze in the bottom of the 80, and we hope to have this operation carried out simultaneously with the sinking of the shaft.

GREAT WHEAL BUSY.—J. Delbridge, J. Petherick, E. Richards, May 10: In the engine-shaft, sinking below the 120, the ground is favourable; lode 2 ft. wide, producing stones of ore and a little tin; the shaft is 7 fms. below the 120. In the 120, west of shaft, the lode is large, but poor. In the 120, east of Offord's, the lode is small and poor. In the 110, east of Offord's, the lode is 4 ft. wide, yielding 8 tons per fathom. Wasley's winze below the 100 is yielding 12 tons per fm.; the 100, Levitt's, 12 tons per fm. The 100 end, east of Levitt's winze, is yielding 22 tons per fm.; the 90, Colman's, 8 tons per fathom; the 90, Mathew's shaft, is yielding tinstuff of good quality. In the 90 end east the lode is 5 ft. wide, producing a little tin. In the 80 winze no lode is taken down. In the 70 east the lode is 8 ft. wide, producing a little ore, but not to value. In the 50 east the lode is 6 ft. wide, poor. In the 100 north cross-cut there is no appearance of any lode. In the 80, west of King's, the lode is from 4 to 5 ft. wide, producing a little tin. In the 70 cross-cut there is no change to notice. In the 50 west there is no change to notice. We are progressing with the new work throughout very satisfactorily. Boscawen's is advanced 4 fathoms below the 50; we are draining about 6 feet per day. We have holed Kitelee's shaft to the 50, and hope in a few days to draw from that level. We purpose sinking this shaft below the 50 with all speed, as below this level no shaft is to be found so deep in the mine. Hunter's shaft is progressing with all speed to the 40. We hope in a week from this time to drain to the 60, which is the deepest level.

GREAT WHEAL FORTUNE.—J. Vivian, N. T. Miners, T. Gregory, May 15: All our works in and on the mine are progressing very satisfactorily. On Saturday next we expect to sell about 23 tons of black tin, the produce of 16 days.

GREAT WHEAL MARTHA.—H. Rickard, May 15: On Saturday last we held our monthly setting for May, which is as follows:—The 52, to drive east, by six men, stented 5 fms., at 4l. per fm. The 52 west, by four men, stented 5 fms., or the month, at 3l. 10s. The 40 west, by two men, at 3l. 10s. per fm., the month out. The 40 east, by six men, stented 4 fathoms, at 5l. 10s. per fm. A winze below the 20, by six men, stented 5 fms. or the month, at 6l. 10s. per fm. The ground by the side of the lode at the 52 east is considerably improved for driving, and the lode is letting out water freely. After we have driven these 5 fathoms I intend to cross-cut the lode, where I anticipate something good. There is no material change in either of the tutwork bargains, and the tribute pitches throughout the mine are much as usual. We are busily engaged in carting the coppery mundic to the quay, as well as in dressing and crushing and preparing for the next sampling.

GREAT WHEAL VOR.—T. Gill, F. Francis, S. Harris, May 13: Metal shaft is sunk to the 162; we have commenced to drive east for a plat, and for the purpose of intersecting the lode, which we expect to cut in the course of three or four weeks from this date. Ivey's shaft is sunk about 10 fms. below the 100, on the course of the lode, which is about 2 ft. wide, but poor for mineral. In the 152 west, the lode is 2 ft. wide, and worth 20l. per fathom. In the 152, east of Metal shaft, we have communicated a winze that was sunk from the 142; and for the last three weeks we have been stoping down a piece of ground in the bottom of the winze, which has yielded very well; we shall resume the driving of the end in the course of a day or two. In the 152, driving north-east of Metal shaft, to cut the north part of the lode, we expect to intersect the lode in the course of the month. In the 142, driving east of Metal shaft, the lode is about 4 ft. wide, and worth about 10l. per fm. In the 132, driving west of Metal shaft, the lode is about 2 feet wide, and worth about 25l. per fm. In the 100, driving west of Ivey's shaft, the lode is about 2 feet wide, but poor. Our stopes are looking much the same as they have for the last month or two. All our machinery throughout the mine is working very well.

HARWOOD.—J. Race, May 12: There is an improvement in the east end this week, now worth 15 cwts. of lead ore per fathom, and seems likely to improve. The west end is about as last reported.

HAWKMOOR.—J. Richards, May 13: The lode in the 50 west is 1¼ feet wide, of a promising character. In the 30 west the men have been set to drive west on the main portion of the lode met with in the cross-cut north. The stopes in back of the 20 east are worth 1½ ton of copper ore per fathom, worth 6l. per ton.—West Hawkmoor: The lode in the 8, west of Venner's winze, is small; the men have been removed from hence, and placed to drive west on No. 3 lode, which is of a promising character, having produced in places throughout the drivage small quantities of saving work for copper ore.

HOLMBUSH.—R. Pryor, T. Woolcock, May 9: We have no material change in the bottom levels since report for the setting, except in the 160, west of stope, which is improved; lode yielding good stones of copper ore. The winze sinking below the 160, west of the lead lode, is worth full 3 tons per fm. The stope west of this winze is worth 30l. per fm. No. 2 winze, west of the lead lode, is not looking quite so well as when last reported on, but from the appearance it will shortly reach its former value.—[illegible] Jack Lode: In the 40, east of shaft, the lode is 4 ft. wide, composed of mundic, spar, and copper ore, with good flookan upon the lode, and letting out more water than ever, which we consider a good indication. The 20, east of shaft, is improved; lode worth 2 tons per fm. We have suspended the 10 east for the present, and put the men in the 40 and 20; each end driving by six men. The tribute pitches are yielding fair quantities of copper ore. Our pay, setting, &c., went off satisfactorily.

KELLY BRAY.—S. James, May 10: There is no alteration of importance in this mine during the past week. There are only five pitches working in both mines—three in the western mine, and two in the eastern. All the machinery is working well at present. We are not in a position to say anything about the new winze. We commenced in the bottom of the 60, eastern mine; there is not any lode taken down yet. If any improvement takes place I will at once advise you of it.

LADY BERTHA.—Captains Harpur and Metherell, May 12: The different ends are much the same, both in appearance and character, as when we reported on Thursday last. The lode in the stopes in bottom of the 30 east has improved, now worth 4 tons, or 16l. per fathom. In the rise above the back of this level no lode has been taken down during the past few days. The tribute department is without change, yielding a moderate supply of ore. The sinking of the new shaft continues to progress favourably.

— Captains Harpur and Metherell, May 15: In the 53 fathom level east the lode continues large, being from 4 to 5 feet wide, composed of quartz, mundic, and stones of ore, letting down a quantity of water. The lode in the 53 west is without any particular change, producing some stones of ore. In the 41 east the lode is 1 foot 6 inches wide, composed of peach, quartz, and mundic, intermixed with a little ore. In the 30 east the lode is 4 feet wide, consisting of peach, mundic, quartz, and ore; this end is looking much more favourable than we have seen it for some time past. The lode in the stopes in the bottom of this level is composed of ore and mundic, worth of the former 4 tons, or 16l. per fathom. In the rise above the back of this level the lode is from 3 to 4 feet wide, composed of peach, mundic, and ore; worth of the latter 3 tons, or 9l. per fathom. The tribute department continues to yield a moderate supply of ore. The ground in the new eastern shaft is much the same as for some time past; favourable for sinking.

LLYWERNOG.—M Barbery, May 14: The 40 ft. wheel was most satisfactorily set to work on Monday, and is now going as easy as a glove, with a moderate feed of water. The embankment progresses well.

LOWER PARK.—W. Davies, May 15: The ground in Stuart's shaft continues hard for sinking. The 40 yard level, driving west from Stuart's shaft, is hard for progress and unproductive. The stopes in back of the 40 yard level, east of Stuart's shaft, have been suspended for the present, in consequence of cutting into a watercourse, which has made it difficult to work them. We have removed the men to drive the 30 yard level east to reach that part worked from the 40; we have some good stones of lead in this driving. The 30 yard level, driving east from the office-shaft, is speedy for progress and looks very promising for lead. The shaft of our winding-machine broke yesterday, which will prevent us drawing for a few days.

MAUDLIN.—J. Tregay, May 10: The lode in the 57, west end, is 2 feet wide, principally mundic, with spots of copper ore; with the present dry weather the water has fallen back considerably for the wheel, and if it continues we shall experience difficulty in keeping the water out of this level. In the 50 east end the lode is principally gossan, with spots of copper ore. A winze has been set to sink in the bottom of this level. We are desuing the lode in the ore ground driven through last winter. No lode has yet been taken down.

MERLLYN.—Wm. Sandoe, May 14: The end going north from the cross-cut, on the new lode, has been extended north about 4 fms., and the end going south from same has been driven south about 3 fms., both these ends have produced generally a good mixture of lead ore, and each are now yielding good dressing work for the washing-floors, and looking very promising indeed. The new shaft, going down on the 20 end, has been sunk full 16 fms., leaving about 4 fms. more to sink to get down to the level, which we hope to do in a month from this time; the lode at present in the bottom of the shaft is very kindly, and produces very good dressing work for lead ore.

MOLLAND.—T. Bennetts: The lode in the engine-shaft, sinking below the 52, is 1½ ft. wide, with cross branches, spotted with ore, dropping into the shaft from the north, and letting out water freely; the ground is still stiff and close for sinking in, but every effort is being made to get down to a 62, and cut the north part of the lode with as little delay as possible. In the rise in the high back of the 32 east the lode above the shaft referred to in my last is 1 ft. wide, poor at present, although producing a few stones of ore. In the 20 east we have commenced sinking a winze to communicate with the rise referred to above; and this, I hope, will be accomplished in two weeks or so with good speed. The lode in the winze is split up in branches, in which we meet with stones of ore occasionally.

NANT-Y-IAGO.—J. Roach: In the 10 west we are driving a cross-cut north in the lode, which is composed of capel, a little quartz and lead ore, but we have not yet intersected the north wall and bearing part of it. The stopes in the back of this level are just the same in character and quality as when last reported on.

NEW SOUTH CARADON.—R. Knapp, May 14: We have resumed clearing the adit under the old shaft, and are making fair progress under the circumstances. The whim-shaft recently commenced is sunk 3 fms. under the surface; we have here unexpectedly intersected a lode, or branch, of great promise, composed of gossan, fluor-spar, quartz, and rich yellow copper ore, characteristic of the best lode in the district. We have also commenced another shaft for ventilation purposes, which will require to be sunk about 14 fms. to reach the adit. I have set this work in the lump, to be completed at 50s. per fm., and hope by the time its service is required to have it communicated. We shall do nothing further in driving on the lodes until we have got through the adit and effected the communication.

NEW WHEAL VADDON.—P. Floyd, May 15: We have been obliged to suspend the sinking of Milldrum's shaft for lack of air; we shall get air-pipes made with all dispatch and fix them without delay, and at once recommence sinking the shaft. No alteration in any other part of the mine since last report.

NORTH BASSET.—T. Glanville, G. Davey, May 14: In the 142, east of the flat-rod shaft, the lode is 2 ft. wide, producing good stones of copper and tin ores. In the winze under the 132, east of the flat-rod shaft, the lode is 2½ ft. wide, producing ½ ton of copper ore per fathom. In the 102, west of Lyle's shaft, the lode is 3½ ft. wide, composed of spar, prian, and stones of copper ore, with a large stream of water issuing from the end, which has completely drained Grace's shaft. In the 92, west of Grace's shaft, the south part of the lode is 2½ ft. wide, worth 7l. per fm. for tin.

NORTH BULLER.—J. B. Delbridge, May 10: There is no particular change in any point of operation during the past week. The men are making good progress in sinking King's shaft. The engine and pitwork are working well.

NORTH JANE.—J. Evans, May 13: Kerr's shaft is sunk 6 ft. below the 10; the lode is opened on 6 ft.; it is 3 ft. wide, worth 15l. per fm. for tin. Harvey's shaft is holed to the adit level, and we expect to complete it to the 12 this month. We have set our pitches, working by 21 men, at an average tribute of 11s. in 1l., and the men are getting fair wages.

NORTH LAXEY.—R. Rowe, May 10: The engine-shaft is now 9 feet below the 38. The trip-plat is completed, and everything ready to allow the sinking to go on without further interruption. You may rely on everything being done to get the shaft down to a new level as fast as possible, and I am in good hopes we shall accomplish it fully to your satisfaction. The lode in bottom of the shaft is 2 ft. wide, chiefly gossan, and carrying some good work for lead. The 38 is now driven 10 fms. south of new engine-shaft; the lode in the end is about 3 ft. wide, and worth ½ ton of ore per fathom; it is plainly the case that the main run of ore ground is dipping south in depth. The driving of the 38, and the working of the stopes in bottom of the 27, demonstrate this as the present order of things at least. I, therefore, look for the most productive ground to be yet before the 38 end.

NORTH WHEAL ROBERT.—Wm. Godden, May 15: We have this morning intersected the No. 1 tin lode, in Rowe's cross-cut, at the 42 fm. level, west of trial shaft, the leading part of which is about 1 foot wide, producing good work for tin. We have also taken down the lode in Bennett's winze, below the 30 fm. level, which is about 1½ feet wide, producing good work for tin. The south part of the lode, in the 42 end, east of Scoble's cross-cut, is improved, laying open good ore ground, both in the back and bottom of the level.

NORTH WREY.—T. Kemp, May 15: We have taken out sufficient ground for the foundation of the engine-house, and I am daily expecting Mr. Gray, the engineer, on the mine to give instructions for the masons to commence the walls. In consequence of some timber giving way in the back of the adit some stuff came down into the level; we have put the men to clear it out, and to make it secure, which I hope will be completed in a few days.

PAR CONSOLS.—F. Puckey, T. Rich, J. Hosking, May 6: We have nothing new to notice in this mine since our last monthly report. The ends in the different lodes are producing both tin and copper, and are looking promising for further improvement. At the present time our stopes and pitches are producing about the usual returns for tin and copper.

PEDN-AN-DREA UNITED.—W. Tregay, J. Thomas, May 10: The sumpmen are sinking as fast as possible, without any hindrance, the lode yielding about 14l. worth of tin per fm. The 110 west is worth 8l. per fm. The 110 east is worth 45l. per fm. for the breadth carried, 6 ft.; no wall. The 100 east is worth 12l. per fm. The 100 east is improving in appearance, and yielding stones of tin. The 100 west is worth 8l. per fm. The 90 west, on Skimmer's lode, is worth 7l. per fm. The 90 west, on engine lode, is yielding stones of tin. The 90 new rise is poor. The 80 west is poor. In the 55 west there is a cross-course in the end, and we are driving through it.—Cobbler's: The 68 east is not ... The 80 west is yielding coarse tinstuff and good stones of copper ore. The 68 ... yet through the lode, which, so far as seen, will yield coarse tinstuff.—Street and Bragg's: The 47 east end is poor. In the 40 east the lode is being desued; none taken down since last report.—Wheal Sparnon: The clearing of the adit level is being proceeded with vigorously.

PENDEEN CONSOLS.—J. Warren, May 10: I see no change to notice during the past week. All our operations are pushed on with all speed. We shall take down the lode in No. 1 stope, in back of the 118, north of engine-shaft, next week, when I will give you a full report on Saturday next.

PROSPER UNITED.—W. H. Martin, W. Millett, May 15: In the 50, east of Louisa's shaft, the lode is 3 feet wide, producing improved quality stamping work for tin. In the same level west the lode is 5 feet wide, containing tin and copper, worth from 15l. to 18l. per fathom. We have commenced to drive a cross-cut in this level to intersect the lodes north of the elvans. The lode in the winze sinking below the 40, east of Louisa's shaft, is 3 feet wide, worth for tin 12l. per fathom. In the winze below the 40, west of the above shaft, the lode is 5 feet wide, worth for tin and copper 18l. per fm. The lode in the 40, east of Hill's shaft, is 4 feet wide, worth for copper and tin 20l. per fathom. The lode in the end west, in the same level, is 18 in. wide, producing a little copper—saving work. In the cross-cut the lode in the 40 west is opening orey ground, worth 2 tons per fathom, presenting good indications as we progress for further improvement. In the winze sinking below the 30, west of Henry's shaft, the lode is 4 ft. wide, yielding work of about the same quality as last reported, worth for tin and copper 15l. per fathom. There is no change to notice in any other bargain since last reported. We are urging on as fast as possible the general work connected with the tin-dressing department, erecting calciner, and preparing to attach sixteen additional heads to the stamps, which will be completed in the course of a week.

REDMOOR.—T. Taylor, May 13: We shall commence to take down the lode in the 40 stopes and end on Johnson's lode this week. The 40 end north is without alteration. The tribute pitches are as usual.

RHOSWYDOL AND BACHEIDDON.—E. Davies, May 10: The engine-shaft is now

in course of sinking below the 15. The 70 east has an orey lode in the end driving. The winze coming down from the 65 is also in a productive lode. The stope in back of the same level produces lead ore. We have also six men underground timbering and packing staff; also two men clearing the adit level driven under Nant level, on Rhosydol side. We have changed our roller-sheds this week, and are now resuming the dressing. I will send you bill of lading next week.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, May 14: The following tutwork bargains and tribute pitches were set on Saturday last:—The 30 to drive west from flat-rod shaft, on the caunter, by six men, at 40s. per fm.; the lode in this end is 20 in. wide, producing stones of copper ore. The same level to drive east from flat-rod shaft, on the caunter, by two men, at 35s. per fm.; the lode here is at present poor. The 40 to drive east from engine-shaft, by four men, at 35s. per fm.; about 8 fms. more driving will communicate this end with Ellen's shaft at the same level. The 40 to drive east from Ellen's shaft by six men, at 35s. per fm.; the lode in this end is 12 in. wide, worth 20l. per fm. No. 1 stope, in back of the 30, east of Ellen's shaft, is worth 35l. per fm.; set on tribute to four men, at 2s. in 1l.; No. 2 stope, in back of the same level, is worth 20l. per fm.; set to four men, at 3s. in 1l.; No. 3 stope, also in back of the same level, is worth 15l. per fm.; set to two men, at 3s. 6d. in 1l. It will be seen from our last setting that we have 10 men working on tribute, at an average of 2s. 10d. in 1l.

ROUND HILL.—May 14: The lode in the back of the 62, south of No. 1 winze, north of engine-shaft, is 5½ feet wide, yielding 25 cwts. of lead ore per fathom; but owing to the size and hardness of the lode our progress at this point is slow. No. 1 stope, in back of the 62, south of No. 2 winze, north of shaft, is suspended. No. 2 stope, north of said shaft, will yield 15 cwts. of ore per fathom. The stope in the back of the 62, south of engine-shaft, is suspended. In the hanging-wall of the 52, north of engine-shaft, we have driven a cross-cut 3 feet, and have met with a branch or lode 2 ft. wide, worth 10 cwts. of lead ore per fathom. We have men driving on it, and shall soon see whether it means anything or not. Surface operations going on well.

SCHULL BAY.—May 9: In driving the 8, west of No. 3 whim-shaft, we have discovered a new cross-course—I call it new, as it is not seen in any of the levels above. At the north side of the level the cross-course is not larger than the size of your little finger, but on opening a few feet south it is 2 feet wide, and consists of flookan and beautiful lumps of spar, strongly stained with carbonate of copper; there is a large quantity of water flowing in, in all directions, out of the end, and I never saw more promising ground for producing large quantities of mineral—in fact, the cross-course is of the same character as the great cross-course east of the engine-shaft, on which I drove a cross-cut south many years ago, and discovered Thomas's lode, which in after months produced 6000l. worth of ore. By the enclosed sketch you will see that the distance from the great cross-course to the new cross-course is 120 fms., and that Thomas's lode for that length is not only untouched, but entirely in whole ground. Now I feel assured, judging from experience and analogy, that if we drive south on the new cross-course, and intersect Thomas's lode, we shall make a most valuable discovery of ore. I estimate the cost for intersecting Thomas's lode—that is, if the ground continues as at present, the distance being about 18 fathoms—and sinking a winze from the deep adit to ventilate the 8 fm. level, as, under any circumstance, we must run a winze through before we can drive so far west as Smith's winze, at about 70l.; and I should not be much afraid to risk this outlay myself, if you will allow me to have the produce of Thomas's lode for myself for six months after it has been intersected in the cross-cut. I expect the men in the 8 will have driven their extent by to-morrow, and I would, therefore, suggest that two of these men should be immediately employed to run up a rise on the cross-course to the deep adit, as it would throw great light on this piece of ground; and the other two men to drive the cross-cut south on the cross-course. When the rise is holed to the deep adit we shall have good air, and I would then employ four men to drive the cross-cut south, and four men to drive the 8 west, to and beyond Smith's winze. The work I have just named is, I consider, of so much importance that I shall be glad to hear from you on the subject by return of post. I have no alteration to report this week in any other part of the mine.

SIGFORD CONSOLS.—W. Hosking, May 14: The pumps have been delivered at the mine, the balance-bob has been fixed, and other alterations made in the pitwork, which have enabled us to resume sinking to-day, and this we shall now continue with all possible dispatch. The lode is much improved in character, and the ground is becoming more favourable for the production of copper.

SILVER VEIN.—E. Burn, May 14: Bere's engine-shaft is down 4 fms. 1 ft.; the ground is a little stiff for sinking, which has made our progress rather slow for the past week. The shaftmen are engaged timbering the shaft, to be prepared for the engineer, which will take them a day or two. The masons are making great dispatch with the buildings, and every other branch of work is going on satisfactorily.

SMITH'S WOOD.—W. Hosking, May 14: The water-course recently taken up from Baptor Valley, for bringing home an increased supply during the dry season, is now completed, excepting the little matter of staunching the leat in the passage of the water to the wheel. The castings are now all on the ground for completing the pumping arrangements by the flat-rods at No. 2 shaft, and the carpenters and smiths are doing all they can to expedite the fixing the same between the wheel and No. 2 shaft. The pitwork is also in course of delivery, and no doubt will be in time for moving off with the flat-rods. The stopes on No. 2 lode, in the back of the 11, continue to yield as for some time past, and we shall very soon be able to get down and open out new ground, as the ground is very easy for sinking—I have a very high opinion of this lode. The western end, on No. 1 lode, is not quite so productive as last reported; but the lode is large, and we may expect an improvement as we acquire depth in driving into the rising ground. The burning and dressing the tinstuff is proceeding satisfactorily; we have several tons ready for market, and are adding to the quantity as fast as our present means of dressing will allow.

SORTRIDGE CONSOLS.—R. Jackson, May 15: In the 40, west of Williams's rise, on the north part of the main lode, the lode is 1½ ft. wide, yielding stones of ore occasionally. In Rowe's rise, in the back of the 40, east of Rowe's cross-cut, on the north part of the main lode, the lode is 1 foot wide, worth ½ ton of ore per fm. In Gilbert's cross-cut, driving north at the 40, east of the eastern shaft, the ground is favourable for driving. In Jenkins's rise, in the back of the 40, on the north part of the main lode, no lode has been taken down during last week. In Stanton's stopes, in the back of the 40, on the south part of the main lode, the lode is worth 2 tons of ore per fm. In Gilbert's stopes, in the back of the 40, west of Gribbon's rise, on the south part of the main lode, the lode is worth 2 tons of good ore per fm. In the 30, west of Eva's rise, on the south part of the main lode, the lode is worth 2 tons of ore per fathom. In the 30, east of White's cross-cut, on the south part of the main lode, the lode in the present end is small and unproductive; the last taking down is worth ½ ton of ore per fathom. In the 30, west of Rodda's cross-cut, on the north part of the main lode, the lode is 2 feet wide, yielding good saving work, and looking very promising for further improvement. There is no change to notice in any other part of the mine.

SOUTH CARADON WHEAL HOOPER.—Wm. C. Cock, May 19: We are making fair progress with the 90 cross-cut north. We have done nothing in the winze this week, as we are cutting ground at the 47 for a balance-bob to relieve the rods in the level, in order to prevent breakages. In the 62 west we have an increase of water, and the end presents rather a favourable appearance, although the lode continues small. In opening on the branch in the 47 we have not yet seen anything of importance.

SOUTH CARN BREA.—T. Glanville, May 10: Tutwork Setting: The flat-rod shaft to sink below the 98, by nine men, at 40l. per fm. The 98 to drive east of the flat-rod shaft, by four men, at 8l. per fm.; the part of the lode driving on is worth 20l. per fm. The 98 to drive west by four men, at 10l. per fm.; the part of the lode driving on is worth 25l. per fm. The 88 to drive east by four men, at 6l. per fm. The 68 to drive east by four men, at 6l. per fm. The 68 to drive east, on the new lode, by four men, at 4l. 10s. per fm.; the lode is 3 ft. wide, producing stones of copper ore. The new shaft to sink below the 68, by six men, at 30l. per fm. The 68 fm. level cross-cut to drive south by two men, at 7l. 10s. per fm. The 58 to drive east by two men, at 11l. per fm. The 48 to drive east by four men, at 8l. 10s. per fm.; lode producing 1½ ton of copper ore.

SOUTH CONDURROW.—W. Richards, May 10: In the 50, east from engine-shaft, the lode is 4 ft. wide, composed of spar, mundic, and impregnated with grey and yellow copper ore; in the same level west the lode is 3 feet wide, with quartz. The 40, east from engine-shaft, is without change to notice since last reported on.

SOUTH CRENVER.—E. Chegwin, May 13: In the 124 west the lode is 1½ ft. wide, producing stones of copper ore. In the 124 east the lode is 2½ ft. wide, producing 1½ ton of copper ore per fm., worth about 6l. per fm. In the 105 east the lode is 2 ft. wide, producing ¾ ton of ore per fm., worth about 3l. per fm. Our tribute pitches are without change to notice.—South Mine: In the 51, east of cross-cut, the lode is 2 ft. wide, producing good stones of tin; the lode in this end is improved in the past week. In the 51 west the lode is 1½ ft. wide, producing stones of copper ore, with spots of tin.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, May 14: In the 50, driving east on the caunter, the lode has not been taken down since last reported; in the same level west the lode is 1 foot wide, producing stones of good ore—tribute ground.

SOUTH TOLGUS.—May 14: Youren's Lode: In Michell's engine-shaft, below the 130, the lode is 2 feet wide, composed of spar, peach, and spots of ore. The lode in the 130 west is 2 feet wide, composed of peach, mundic, jack, and stones of ore, and letting out more water than usual. The lode in the 120 west yields 1½ ton of ore per fathom. The lode in the winze, sinking in the bottom of the same, yields 2 tons per fm. The lode in the 110 west yields 3 tons of ore per fm., and the stope in the back of the same yields 3 tons per fm. In the 100 west the lode is 2 feet wide, looking very promising for a good bunch of ore, now producing 1 ton per fm. The lode in the winze, sinking in the bottom of the 100, is 18 inches wide, producing good stones of ore; we hope to communicate it to the 110 in a few days. In the 90 west the lode is small and unproductive; the same will apply to the rise in the back of the 90 and the 78 fm. level west.—South Lode: In the 130 east the lode is 2 feet wide, composed of spar and stones of ore. The lode in the 120 east, and in the 110 east, has not been taken down since last reported. We have two stopes in the back over the 110, each yielding 2 tons of ore per fathom. The 100 east is still driving in the cross-course ground.

ST. JUST UNITED.—J. Carthew, May 14: We have now forked the water at the engine-shaft 12 fms. below the deep adit level. The sumpmen are preparing to drop the pumps to the 16. The engine, with only a 5-in. box, can fork the water faster than we can get around the work in the different shafts. We have one pitman, six sumpmen, and three miners employed at the engine-shaft; six men, one filler, and one lander at the Red Dipper whim-shaft expect to get down this shaft to the deep adit level next week. Six men clearing up Wheal Widden whim-shaft. In the shallow adit level, east and west of the shaft, there is a good looking tin lode, which some miners want me to set them on tribute, but I intend to clear up this and the Red Dipper shaft to the deep adit before setting any tribute pitches, which I hope will be about the end of this month. Four men are preparing skip-road at East Buck shaft. The water here is 15 fms. below the deep adit level. There are six men at the Badger shaft, seven masons building steam-whim and boiler-house, six men breaking clay and stones for masons, two carpenters and two men getting up horse-whim at Oats's shaft; three carpenters doing sundry work, two smiths, two strikers; two enginemen working steam-engine; four men and two boys sawing timber for various purposes; eight men making large pool for water for tin dressing; twelve men removing ground tin dressing-floors, &c. The more I see of the lodes the more I am convinced we have a first-rate run of mines. My earnest endeavour now is to get the steam-stamps and steam-whim to work without delay, when I am certain the returns will soon show that we have a good mine.

TAMAR SILVER-LEAD.—May 14: The ground in the 250 south is hard for driving, owing to there being much spar in the end. In the 237 south we are driving by the side of the lode. The three stopes in the back of this level are producing as follows:—No. 1, 21 cwts.; No. 2, 10 cwts.; and No. 3, 7 cwts. of lead per fm. The lode in the 228 south is 2½ ft. wide, composed of capel and spar, with good stones of lead. The stopes in the back of this level are yielding respectively 10, 7, and 5 cwts. of lead per fm. The lode in the 215 south is 18 in. wide, and will produce 11 cwts. The stopes in the back of this level, five in number, will produce as follows:—No. 1, 12 cwts.; No. 2, 5 cwts.; No. 3, 10 cwts.; No. 4, 11 cwts.; and No. 5, 8 cwts. of lead per fm. The stope in back of the 206 is yielding 4 cwts. of lead per fm.

TOLCARNE.—May 14: Field's Lode: In the 40 fm. level ends, east and west, the lode is 14 inches wide, consisting chiefly of gossan. The lode in the 30, driving west, is 15 inches wide, composed of gossan, spar, and a little grey ore. In the 30 east the lode is 2½ feet wide, composed of spar and spots of yellow copper ore—a kindly lode. The lode in the 20 west is 1 foot wide—unproductive. In the 20 east the lode is 16 inches wide, composed of gossan, spar, and yellow copper ore, yielding ½ ton of the latter per fathom. The lode in the 10 east is 10 inches wide, composed of soft spar and black ore—a kindly looking lode. The lode in the adit end, driving east of shaft, is 13 inches wide, composed chiefly of gossan and soft spar—a kindly lode.—Enthoven's Lode: The lode in the stope in the bottom of the adit level is worth about 35l. per fm. for tin. The ground in the adit cross-cut south is hard.—King's Lode: The lode in King's shaft, sinking below the adit level, is 10 inches wide, composed of soft spar and black ore—a kindly hode.

TRELOWETH.—T. Richards, May 15: In the 144 cross-cut, driving south, we have not cut the lode. The lode in the 134 end, west of Cole's engine-shaft, is worth 18l. per fathom for copper ore. The 134 cross-cut, driving south through the lode, continues to be unproductive. The winze sinking below the 134, west of Cole's, is worth 20l. per fm. The 80 end continues to yield a little copper ore throughout the lode, and worth 2l. per fathom. The pitches continues to yield about the usual quantity of copper ore.

TRENCROM.—R. Hollow, F. Bennetts, May 15: The men at Giesier's engine-shaft are engaged fixing pitwork at the 90. The lode in the 100, east of the engine-shaft, is worth 5l. per fathom. The lode in the 90, east of the engine-shaft, is worth 5l. per fathom. The lode in the 70, east of the engine-shaft, is worth 2l. 10s. per fathom. Hollow's shaft is communicated from the 40 to a back in the 60, in cutting it down to make the shaft its size; the east end of ground is worth 7l. per fathom. The flat-rod shaft is sunk below the 30 fm. level 3 fathoms; the lode is worth 10l. per fathom. The 60 east, on the new lode, is worth 3l. 10s. per fathom. The rise in back of the 60, on the new lode, is worth 6l. per fathom. There is no change in the 100 cross-cut north to notice.

TREVENEN AND TREMENHEERE.—J. Medlen, W. Tippett, May 13: Trevenen engine-shaftmen have been engaged in the past week putting in the dam and fixing the drawing-lift, consequently there has not been much done in the bottom of the shaft. There is no change in Tremenheere engine-shaft since last report. No. 1 stope, in the bottom of the 170 east, is worth 12l. per fm.; No. 2, 10l. per fm. No. 1, in back above, 9l. per fm. The stope in the 140, west of whim-shaft, is suspended on account of cutting water there. The men are again put to clear the 150 below these bottoms, to try to reach the shaft and let down the water. There are indications of an improvement in the 170 west end, the lode is larger and wetter; we are progressing favourably in clearing the 160 west, we have struck whole ground in the bottom, and suppose it will soon be the end high. Our tributers are increasing; we have now thirteen pitches, working by thirty-one men, at an average tribute of 10s. in 1l.

TREWEATHA.—May 13: I have placed the shaftmen at the shaft to make preparation of the new pitwork, and removed the men from the 30 north, where the air is bad at present, to drive the 30 south; this level has just passed through a slide; the lode is 3 ft. wide, producing 3 cwts. of lead ore per fm.—a very promising lode. The stopes in back of each level produce on an average 4 cwts. of lead per fm.

TRUMPET UNITED.—G. R. Odgers, May 10: The lode in the 38, east of shaft, is 6 inches wide, with stones of tin. The lode in the 38 west is 6 in. wide, producing good stones of tin, and letting out a quantity or water; hence I am expecting a change for the better shortly. In the 25 west we have had a good branch of tin, but yesterday we intersected a small cross-course, which has disordered the lode, but seeing the good lode we had in the winze nearly over this place, we think it will only be temporary; hence we are expecting an improvement again. The stope above the 25 west is worth from 4l. to 5l. per fm. The lode in the winze sinking below the 15 west is nearly 1 ft. wide, producing splendid work for tin, worth 12l. per fm. There is no alteration in the shaft on Wheal Ann lode since our last, the men having been engaged erecting a horse-whim &c.

VALE OF TOWY.—May 13: In the 110, south of great cross-course, the lode is 2 ft. wide, composed of friable spar, with lead and blende ore throughout. The end is not so productive as when reported on last Thursday, but the indications are very encouraging, and the probability is that we are now entering upon a fresh run of ore ground. In the 100, south of Field's shaft, the lode is 3 ft. wide, composed of elvan and blende, with small stones of lead ore throughout; saving work. The stopes in the back of the 90, south of said shaft, are yielding barytes and blende in profitable quantities. In the new adit level, south of Nant, the lode is 2 ft. wide, composed of barytes and gossan, but not to value; ground moderate. Jones's pitch, in back of the 80, north of Bonville's shaft, is yielding 1 ton of lead ore per fm. Trownson's pitch is yielding ½ ton per fm. Lewis's pitch, in the 70 north, is producing 25 cwts. per fathom. Poole's pitch is worth 12 cwts. per fm. Williams's pitch, in the 50 north, is worth ½ ton per fm. Treharne's pitch, in the 40 south, is worth ¾ ton per fm. May's pitch, in the 60, south of shaft, is worth ½ ton per fm. Barywarne's pitch, in the 20 south, is worth ½ ton per fm. Hugh's pitch, in the 40 south, is producing ½ ton per fm. Powell's pitch, in the 30 south, is worth 12 cwts. per fathom. Paul's pitch, in the 20 south, is worth 15 cwts. per fm. Harris's pitch, in the 10 north, is producing 10 cwts. per fm. Rich's pitch, in the 30 north, is worth ½ ton per fm. Those in the south part of the mine are poor.

WENTNOR (Pantasa).—J. Kemp, May 15: We have got the air-pipes fixed, and the men are now able to push on again with the 92 yard level—the ground is stiff; the lode is large, producing occasional stones of lead, and every fathom we drive looks more promising. I have great hopes of getting something very good when we reach the north and south lode. Saturday, the 3d, being our settling-day the 92 was let at 9s. per fm.

WEST BASSET.—Wm. Roberts, May 14: In the 114, west of Percy's shaft, the lode is 2 ft. wide, producing 1½ ton of ore per fm. In the 104, driving east of Grenville's shaft, the lode is 4 ft. wide, producing 4 tons of ore per fm. In the 84 west the lode is 1 ft. wide, worth 1 ton of ore per fm. Other parts are much the same as last reported.

WEST BEAM.—W. Hosking, May 14: The engine has been put in motion, and, considering the want of balance-bob to adjust the heavy attachments of rods in the shaft, with one or two matters of drain-pipe, and steam to stuffing-box, which are being got forward with, works well. The men are busy in clearing, casing, and dividing the shaft below the adit level. The ground in the cross-cut is favourable for driving, and the daily increase of water and other indications afford proof that we cannot be far short of intersecting the south lode. We have enlarged and secured the western shaft down 22 fms. A pure stream of water has been brought home from Langworthy Brook for supplying the engine. The boiler-house roof is completed, and the masons are now engaged finishing the internal work of engine-house. The bob-stand is ready, cast-iron balance-bob in position, and I hope to have this also connected by Thursday, with capstan, shears, and other gear erected.

WEST CONDURROW.—G. Bennetts, G. Jewell, May 7: At our monthly setting, on Saturday, we set the following bargains:—The shaftmen to cut a plat at the 36 fm. level, by six men, at 16l. per fm., as per bargain. The 36 to drive south of the engine-shaft, by four men, at 6l. per fm.; the driving of this level to intersect Bickford's, Smith's, and other lodes, is of great importance, and we shall push on with this as speedily as possible. The 36 to drive east of the engine-shaft, by three men and three boys, at 2l. per fm.; the lode in this end is improving as we drive further east. The 24, west of the engine-shaft, by one man and one boy, at 1l. 10s. per fathom; the lode is 9 in. wide, but poor. The 24 to drive east of Purser's shaft, by four men and two boys, at 3l. 10s. per fm.; the lode in the end is 1½ ft. wide, worth 20l. per fm. The stopes in back of the 24, east of Purser's shaft, to stope by four men and one boy, at 1l. 10s. per fm.; the lode is worth 15l. per fm. The 12, east of Purser's shaft, to drive west from a rise, by two men and one boy, at 2l. 10s. per fm.; lode worth 5l. per fm. We set a bargain to four men to cut a plat at Purser's shaft, and have everything ready for sinking; and when this is done we shall sink with all expedition to the 36, to place us in a position to command the rich course which we have had at the levels above, and which considerably widens and increases in value as it gets deeper. The deep adit to drive east of Purser's shaft, by three men and three boys, at 3l. per fm.; the lode in the end is 1 ft. wide, and producing good stones of tin; this lode has much improved.

WEST DEVON.—J. Donnal, May 15: The lode in the shaft is not quite so large as when last reported on, but looks more promising than it has hitherto done throughout the sinking, and the water issuing more freely indicates that the lode is becoming more porous; the lode is composed of capel, mundic, quartz, and occasional stones of ore.

WEST POLMEAR.—R. Hancock, W. Body, May 14: The cross-cut is extended south of No. 4 lode about 9 fathoms; the ground is kindly and easy for driving. We have passed through some cross branches, which are strong with water, and the end at present is dry. We are giving 4l. per fathom for the driving of this end. The rise is up 9 fathoms above the back of the 20; the lode is 1 foot wide, composed of mundic, spar, and peach, but poor for mineral. The new shaft is sunk 11 fathoms below the surface; the lode is just the same size and quality as in the rise below. We are sinking at 3l. per fathom, and rising at 50s. We hope to hole this ground in about a month from this time.

WEST SHARP TOR.—Wm. Richards, May 12: The ground in the 150 west is favourable for progress; there has not been any lode taken down in the past week. We shall do so this week, and report its character in my next. I regret to say the part of the lode being carried in the 162 west is deteriorated in value since last week, in consequence of an oblique branch 20 in. wide, composed of quartz and capel having come into the lode from the south-east. It is, however, still yielding about 9l. worth of ore per fm., with kindly indications. The part of the lode being carried in the 162 east is composed of gossan, quartz, iron, capel, and a little rich copper ore, with favourable granite for progress on the south side thereof.

WEST WHEAL TREVELYAN.—G. R. Odgers, J. D. Osborn, May 9: At the 58, west of the shaft, the men are now engaged cutting through the lode, in which we find good stones of ore, and letting out a quantity of water. We have two stopes working in back of the 58, where the lode is worth from 6l. to 8l. per fathom. At the 48 west we have not yet found any more lode, although we have driven north from 3 to 4 fms.; the ground is a nice killas. We have a stope working in back of the 48, where the lode is worth 8l. per fm.; this is a kindly piece of ground. In the 28 cross-cut we have intersected a small branch, letting out water, and which is composed of quartz, with mundic and ore.

WHEAL AGAR.—Wm. Roberts, May 14: In the 90 east the lode is 2½ ft. wide, at present unproductive; in the same level west the lode is 2 ft. wide, producing stones of ore. In the 80 east the lode is 1½ ft. wide, promising, with stones of good ore. In the 80 west the lode is 2 ft. wide, chiefly composed of spar and flookan; this end, and the 70 west, is not yet clear of the cross-course. Nothing new in the cross-cuts. The stope in back of the 80 is improved, producing 4 tons of ore per fm. In other parts there is no alteration to notice since last reported.

WHEAL ARTHUR.—T. Carpenter, May 15: We have commenced sinking a winze in bottom of the 50 fathom level, 10 east of boundary cross-course, on the middle lode, where the lode is worth from 8l. to 10l. per fm. We have to drive the adit level 8 fms. east to get under this winze, which will be 14 fms. deeper than the 50, and about 3 fms. from boundary. There is no change worthy of notice elsewhere. We shipped yesterday 21 tons of sulphur mundic, and are preparing a parcel of copper ore to sample the end of this month.

WHEAL BASSET AND GRYLLS.—J. B. Wilkin, W. Harris, S. Tredinnick, May 10: During the past month the 22, east of Robarte's shaft, has been driven 2 fms. 0 ft. 6 in., and communicated to the 23, east of Wheal Fat, opening ground that may probably work on tribute, and affording facilities for drainage and ventilation.—Wheal Fat: Wheal Fat shaft, sinking below the 30, has been sunk 1 fm. 1 ft., the shaft producing low-priced stamping work; we expect the caunter lode to come into this shaft in course of another month; set to sink by nine men, at 30l. per fm. The 30, west of Wheal Fat shaft, has been driven 2 fms. 3 ft. 3 in.; the lode at present poor; set to drive by four men, at 8l. per fm. The 30, east of Wheal Fat shaft, has been driven 2 fms. 5 ft., opening tribute ground; set to drive by six men, at 7l. per fm. The cross-cut, south of Wheal Fat shaft, has been driven 4 ft. 8 in. through the caunter, and west on the caunter 3 fms. 6 in., opening tribute ground; set to drive by six men, at 10l. 10s. The 23 south-west on the caunter has been driven 2 fms. 5 ft. 6 in.; the lode is poor; set to drive by two men, at 3l., and 10s. tribute. The 23, east of caunter, on Ferguson's lode, has been driven 3 fms. 5 ft. 3 in., opening tribute ground; set to drive by four men, at 4l. per fm. A winze in the bottom of the 16, on this lode, has been sunk 3 fms. 4 ft. 6 in., opening tribute ground; set to sink by six men, at 4l. per fm. Harris' shaft, sinking below the 16, has been sunk 3 ft. 6 in.; we have 4 ft. more to reach the 23, when we shall drive south to cut the Gent's and Ferguson's lodes; set to sink by four men, at 5l. 10s. per fm. A cross-cut has been started from Ferguson's lode south to cut the south lode, and driven 3 fms. 9 ft.; set to drive by four men, at 3l. 10s.—Tyacke's: The cross-cut, north of Tyacke's shaft, has been driven 1 fm. 4 ft., no change to notice; set to drive by six men, at 13l. 10s. The cross-cut, south of Tyacke's, has been driven 1 fm. 4 ft. 6 in.; some branches of mundic and tin have been seen; set to drive by six men, at 13l. 10s. Wilkin's shaft, sinking below the 22, has been sunk 1 fm. 3 in.; set to sink by eight men, at 20l. per fathom. The 30, west of Richard's winze, has been driven 3 fms. 3 ft., on Tyacke's lode, opening tribute ground; set to rise against Wilkins's shaft, at 7l., by six men; we expect to communicate with the shaft in the coming week. The 30, east of Richard's winze, has been driven 1 fm. 1 ft. 6 in.; the lode is disordered by a clay-course; set to drive by three men and three boys, at 35s. per fm. The 22, west of Wilkins's, on the caunter, has been driven and stoped 4 fms. 3 ft.; the lode in the end worth 10l. per fm.; set to drive by six men, at 8l. per fm., and 5s. tribute. Number of tributers 58, at tributes varying from 5s. to 13s. 4d.; tin sold last month, value 1232l. 13s. 9d.

WHEAL CARADON.—F. Pryor, J. Brown, May 10: The following is our setting report of this mine:—The 50, west of engine-shaft, is still presenting a very promising appearance, and producing some very good ore; set to six men, at 4l. 15s. per fathom. The 50, east of the engine-shaft, on the same lode, is in the influence of the elvan course, consequently the lode is disordered, and not so rich for copper; set to six men, at 6l. 10s. per fm. The engine-shaft is now down 7 ft. below the 50, and the deeper we are going the better appearance the lode is showing, and we are glad to say we have broken some very fine stones of copper ore the past month. The cistern-plat is now cut, and we hope in about a week from this time to complete the fixing of the drawing-lift, after which the sinking of the shaft will be pushed on as fast as time will permit by nine men, at 25l. per fm. The lobby level, on Mary's lode, is now under the trial shaft; a rise will now be commenced to communicate with the shaft, and when holed we purpose sinking under this level for proving the lode in depth, which we are of opinion will be no ordinary speculation.

WHEAL CUPID.—R. Pryor, sen.: No change worthy of notice has taken place in this mine during the past week. We shall sample on Wednesday next about 16 tons of fair quality copper ore.

WHEAL EDWARD.—M. H. East, May 10: South Lode: In the 92 west the lode is 3½ ft. wide, yielding rich stones of ore—a kindly lode; driving by six men, at 12l. per fathom; this end is letting out 170 gallons of water per minute, and we think the ground between the cross-course and the caunter is sufficiently drained to enable us to sink a winze below the 81, therefore we purpose to commence about it forthwith. The winze will be commenced sinking in a large orey lode, and is set to six men, at 10l. per fm. In the 81 west we are driving by the side of the lode by four men, at 8l. per fm. We have a hope that this level will shortly drain to the 71, when a new winze can be sunk below that level west of the caunter in a good lode of ore. The lode in Collins's stope, in back of the 71 west, is worth 2½ tons of ore per fm.; set to four men, at 3l. per fm. In the 61 west the lode is about 1 ft. wide, poor; set to four men, at 6l. 10s. per fm. Goodman's rise, in the back of the 61 west, is up 5 fms., in which the lode is 5 ft. wide, and is worth 4 tons of ore per fm. for 6 ft., but it is hard, and spare for working, and we are of opinion that when the 50 is brought up to the point where the rise is put that a communication can be made with the 50 by means of sinking at less cost than can be done by rising, therefore the rise is suspended, and the same men put to stope west of the said rise from the back of the 61, which is set at 3l. per fm., and the lode is worth 4 tons of ore per fm. In the 61 east the indications are a little better, and we purpose to continue the drivage in the same direction for the present; set to two men and two boys, at 4l. per fm. In the 50 west the lode is worth 1½ ton of ore per fm., with a good appearance; set to four men, at 8l. per fm. In Thomas's stope, below the 40 west, the lode is worth 2 tons of ore per fm.; set to six men, at 2l. 8s. per fm. In the 40 west the lode is worth 2 tons of ore per fm.; set to six men, at 7l. per fm.—New South Lode: At the 50 we intend to take down the lode in each end at once, after which we can consider the propriety of continuing these ends on this lode, and resume driving the cross-cut, when the lode is taken down I will write you again on this matter, and state what in my opinion should be done for the best. We must not lose sight of the Phœnix lode, and it can be cut in less than six months.—New North Lode: In the 62 west there is no alteration worth notice; the lode continues large, and the end is being driven by two men, at 6l. per fm.—Tribute: There is nothing new in any of the pitches worth mentioning. The engine, pitwork, &c., are in good working order.

WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, May 10: The shaftmen are making as much progress as they possibly can with the sinking below the 110. The lode in the rise above the 110, west of the shaft, is not looking quite so well as it did; this we expected, because it is nearly up to the 100: we hope to hole this next week, when we shall resume the 110 west. The lode in the rise above the 100 west is nearly 18 in. wide, a good lode, worth 2 tons of ore per fm., nearly all yellow. The lode in the winze below the 90 west is 15 in. wide, a good lode, yielding 1½ ton of ore per fathom; this is a kindly piece of ground. We are making good progress with the cross-cut north towards the caunter at the 80. The pitches are looking much the same as for some time past.—New Lode: In the 80, east of cross-cut, the lode is from 4 to 5 ft. wide, and producing good work for tin, worth much the same as for some time past—a good lode. The lode in the rise above the 80 is at present poor. We have about 12 fms. more to drive at the 66 to intersect the new lode, which we hope will be accomplished by the time calculated upon. We purpose sampling our tin in the stone on Wednesday next, when you shall be fully advised.

— G. R. Odgers, W. Bennetts, May 15: There is no alteration in any part of this mine calling for a remark since our advise of Saturday. We sampled yesterday 37 tons 4 cwts. of tinstuff, some of which is good work.

WHEAL GRYLLS.—May 15: Fisher's Lode: In the 30 end, east of Annie's engine-shaft, the ground is a little harder for driving than it was. The lode is worth 20l. per fathom. At the flat-rod shaft we have fixed bearers, and commenced cutting the cistern plat. At the 20, east of this shaft, the lode is 2½ ft. wide, worth 10l. per fm. Grylls whim-shaft is down 7 fms. below the 10; the lode is worth 6l. per fm.—Georgia Lode: Georgia shaftmen are engaged fixing rods, preparatory to sinking the engine-shaft. In the adit end, driving north, the lode is worth 20l. per fm. In the two stopes in the back of this level there is no alteration; the lode in each stope is also worth 20l. per fm. In the 33 end, driving north, the lode is worth 30l. per fm.; the stope in the back of this level is worth 25l. per fm. In the 23, driving east, there is no alteration; the ground is favourable for driving.—South Lode: At the 20, driving east, the lode is 18 in. wide, producing some good stones of tin.

WHEAL HARRIETT.—S. Williams, May 10: The ground in the engine-shaft is without change to notice. The lode in the 115 end is at present unproductive. In sinking Alexander's shaft we are making good progress, and the ground continues very soft. The lode in the deep adit end is worth 10l. per fm., with appearances promising for an improvement. The lode in the rise above the deep adit is worth 10l. per fm.

WHEAL HOPE.—Wm. H. Reynolds, May 13: In the 28 west the lode has a better appearance than for some time past, and we expect it to improve. In the 28 east, on the south lode, we are breaking some good leady work. The 14 west, on the middle lode, is yielding about 3 cwts. of lead per fm.

WHEAL MARY ANN (Liskeard).—P. Clymo, H. Hodge, Jos. Harris, Jas. Stevens, May 15: The lode in the 170, north of Pollard's shaft, is 4 feet wide, worth 5l. per fm. In the same level south the lode is 2½ feet wide, worth 11l. per fathom. In the 160 north the lode is 1½ ft. wide, worth 4l. per fathom. In the same level, south of Clymo's shaft, the lode is 3 feet wide, worth 7l. per fathom. We have this day cut a branch, or lode, in the 110, composed of spar, mundic, and a few spots of lead; we cannot tell its size, as we are not through it. Clymo's shaftmen are still engaged in cutting a plat in the 170. The stopes and pitches are producing much the same.

WHEAL MOYLE.—May 14: We are sinking the engine-shaft below the 30 with all dispatch. We are cross-cutting north and south at the 30; we have about 10 fathoms north to our north lode and about 6 fathoms south to Ash lode. We are sinking a winze below the 20 on the south lode; the lode is worth 4l. per fathom. The 20 end west, on the south lode, is worth 5l. per fathom. The appearance of the present end would lead us to expect an improvement shortly. Our other ends and stopes are just as when last reported.

WHEAL NORRIS.—J. Nance, J. Andrews, May 10: At our setting to-day, the following bargains were let:—Carter's shaft to sink below the 15, to nine men, at 29l. per fm.; present depth 6 fms. 3 ft. 3 in. below the 15, and the ground much the same as it has been for some time past. The 15 to drive east of Carter's shaft, on No. 3 lode, let to four men, at 7l. per fm.; in the past week we have had a very rich branch of tin in this end, about 2 in. wide, but in the present end the lode is 12 in. wide, and poor; it is probable that we shall have an improvement in this end as we approach under the tin ground we had in this lode at the adit level, and where the ancient miners wrought a sink below the said level, which is now filled with water, but we hope soon to drive it, in extending the 15 east towards the said point. The 15 cross-cut to drive north of Carter's shaft, to six men, at 7l. per fm.; at this point the ground appears to be a little easier for driving. A rise in back of the 15, east of Carter's shaft, on No. 4 lode, to six men, at 20s. per fm. Our object is, as we have an accumulation of tinstuff in the stalls for the stamps, to put a rise up through to the adit level for ventilation, and also to form the ground. The 15 cross-cut to drive south of Cremorne engine-shaft, to four men, at 10l. per fm.; at this point the ground continues hard and wet. We have now let the Cremorne engine-shaft to-day; it is now down 19 fms. 5 ft. below the 15; we purpose sinking 2½ feet deeper, and then case and divide the shaft, and bring the machine whim-kibbles to bottom to raise the stuff.

WHEAL PROSPER.—H. Stephens, May 15: In the 30, driving east on Porth-cue, there is a good branch of copper ore; the lode is from 8 to 10 in. wide, and improving as we progress towards the ore gone down in the 20. In the 20 the lode is not quite so good in the end as it has been, but still contains a good branch of ore, and looks fair for improvement. The water is abated in the winze below this level, and we have resumed sinking; the lode in this is 2½ feet wide, 20 inches of which is solid ore, of excellent quality, worth from 30 to 40l. per fathom: this winze improving as it is sinking, speaks well for the next level. We have not yet reached Trewava's lode, but the end must be getting near it. There is no change to notice in the engine lode since my last.

WHEAL PROSPIDNICK.—R. Kendall, May 10: The lode in the 33, east of Watson's shaft, is 2 ft. wide, and producing good stamping work. The lode in the 33 west is much the same as last reported. The rise in back of the 22 is communicated to the whim-shaft; the men will now commence sinking a winze in the bottom of this (22) level. There is no change at Wilson's shaft since last report.

WHEAL TRELAWNY.—R. Pryor, jun.: I have just come up from underground, and am glad to inform you the 162, south of Smith's shaft, is looking better. The 162, north of Chippendale's shaft, is improved, worth full 8l. per fm.

WHEAL TREMAYNE.—R. Williams, J. Williams, May 10: At the boundary engine-shaft, in the 133 east, Allen's branch is yielding low price tinstuff, with a favourable appearance for an improvement shortly. In the 123, east of Allen's shaft, Allen's branch is worth 24l. per fm. The stope in bottom of the same level, east of skip-shaft, on Allen's branch, is worth 8l. per fm. In the 113, east of same shaft, Allen's branch is split and a little disordered for the present, worth 10l. per fm. The stopes in back and bottom of the said level, on Allen's branches, are worth on an average 14l. per fathom. In the cross-cut north of the same level there is no change to notice. In the 103, east of the same shaft, Allen's branch is worth 7l. per fm. The stope in back of the same level is worth 9l. per fm. The skip-shaftmen are still engaged opening plat and securing ground in the 113, and hope to commence drawing from the same level in a few days.

WHEAL UNION.—T. Glanville, May 9: Tutwork Setting: The plat to cut at the flat-rod shaft, and prepare to sink by nine men, per bargain, 30l. The 40 to drive east on the middle lode, by six men, at 7l. 10s. per fm. The 30 cross-cut to drive south of the south lode, by two men, at 9l. per fm. The eastern shaft to sink below the 30, by nine men, at 22l. per fm.; lode worth 20l. per fm. The 18 to drive east of the eastern shaft, by four men, at 4l. per fm.; lode 3 ft. wide, composed of gossan, mixed with a little copper ore. The winze to sink below the 18, by two men, at 4l. 10s. per fm. The 20 cross-cut to drive south of the old engine-shaft, by two men, at 9l. per fm.

YARNER.—R. Barkell, May 14: The lode in the 30 west is looking more promising than for some time past; the two stopes in the back of this level are each yielding 3 tons per fm. We are still extending the two cross-cuts at the 40; there have not been any branches cut in either of them during the week. The engine-house is up, and the masons are busily engaged in building the stack, and to-morrow they intend to commence building the boiler-house.

NEW WATER-WHEEL.—Mr. Julius Sturm, of Mannheim, has patented an invention, which consists in the substitution of the archimedian screw for the hydraulic wheels, and similar motors by means of which water-power is commonly applied to the production of mechanical action.

WHEAL GRENVILLE.

The following report of this mine is by Captain James, the confidential agent of Messrs. Webb and Geach:—

Redruth, May 13.—I inspected this mine yesterday, and send you the following as my report:—The engine-shaft is in course of sinking under the 110; the lode at present is standing to the south, therefore nothing can be said of its character. The 110 is extended west of shaft 31 fms.; for the first 24 fms. the lode was kindly, and produced a little ore in places, but the last 7 fathoms the lode has been from 18 in. to 2 ft. wide, and has produced from 2 to 2¼ tons of ore per fm., and worth in money value from 15*l.* to 20*l.* per fm., and a very pretty lode in the present end worth full 20*l.* per fm. This end, as you will see by sections, has not yet reached the caunter, and no doubt a great improvement will take place at that point. A rise has been put up close to the present end, and they have only about 6 feet more to communicate to the 100. The lode in this rise is worth from 12*l.* to 15*l.* per fm., and will as soon as communicated open out a good piece of tribute ground, which will be taken away at about 5*s.* in 1*l.* I should here state, before I close my remarks on this 110 fm. level, that the lode gone down in the bottom is of a splendid character, and looks well for the 120, which they calculate to open out in from five to six months. The 100 is driven west from shaft 54 fms.; the first 29 fms. was unproductive; the next 10 fms. lode worth 10*l.* per fm.; and the remaining 15 fms., on the caunter, lode worth 15*l.* per fm. They are also putting up a rise near this end, to communicate with the winze sinking under the 90, and at this point also a splendid piece of tribute ground will be opened out; the lode is worth in the rise 15*l.* per fm., and in the winze about the same value. The 90 is extended west of shaft 51 fms.; the last 23 fms. have been on the old lode, and worth only from 5*l.* to 6*l.* per fm., but in sinking a winze on the old lode, near the present end, they discovered the caunter lode, which appears to be standing all whole from the 90 fm. level upwards untouched, and by the dialling it would appear there are 7 fathoms to drive at the 80 to intersect it; they are putting out a cross-cut, and no doubt will cut the lode in a month more. The copper department in this mine has greatly improved since I inspected it in January last, and I believe the western part of the mine is going to be found profitably productive. The new tin lode cut in the 80 cross-cut has been opened on west 5 fms., and the lode poor, and east 4 fms.; the lode is 4 ft. wide, a fine looking lode, and worth 20*l.* per fathom. This lode has every appearance of a copper lode, and I believe will produce copper eastward: it certainly is a fine looking lode, make what it may. It appears their monthly cost is about 250*l.*, and after they have holed these winzes, and again resume the driving the levels west, and set the backs on tribute, I see no difficulty in raising sufficient copper ore to pay the cost of the mine; and should the lodes in the different levels continue to open out as well as at present, they will be able to pay dividends in six months from this time. They intend sampling 120*l.* worth of tinstuff from the new lode to-morrow, which will give something like the value of it, and guide them in their future calculations.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

WHEAL LUDCOTT.—In confirmation of what has already appeared in the Journal, this mine continues to present prospects of the most encouraging character. Last week there were sold 3½ tons of rich silver-lead ore, which realised 1340*l.*, or 378*l.* per ton, and there are ready for sale next week 20 tons, which it is estimated will realise 700*l.*, or 35*l.* per ton. During the following week there will be sold 50 tons more, the value of which is estimated at 20*l.* per ton, and 1 ton which the agents compute will fetch something like 1000*l.* The second instalment of 1225*l.* has been paid for the purchase of Wheal Wrey, and the last instalment will be paid at the ensuing general meeting; after which, it is confidently expected, the payment of dividends will be resumed. The reserves have considerably increased.

At NORTH TRESKERBY, within the last few weeks, 2000*l.* worth of copper ore has been discovered in the 57, east of Tressidder's shaft; also about 2000*l.* worth in the neighbourhood of Tressidder's shaft; and more than 1000*l.* worth in the 47 east, boundary shaft, and other parts of the mine; the greater part is in very easy ground, and will leave large profits.

The new engine manufactured by Messrs. Nicholls, Williams, and Co., was put to work at EAST FALMOUTH, in presence of the directors: the engine worked off well. The prospects of the mine are excellent.

NORTH ROBERT, as predicted, will turn out well. The last report is highly encouraging; the tin lodes are looking well, and, no doubt, if stamps were erected they could be worked profitably. The next sampling of copper will also be a good one.

SOUTH DARREN.—Several of the levels in this mine are looking much better. A box of very fine specimens of the silver-lead ore has been received at the office. Considerable improvements are looked for daily in the 60 east, 30 west, and 80 fm. level, east and west. Some fine specimens of silver-lead ore from this mine are at the Exhibition.

NORTH TRELAWNY.—The ground in the 76 is eased, and a quantity of water is coming from the cross-cut at this level. The great and sudden improvement in Ludcott, immediately adjoining North Trelawny boundary edge, causes great anticipations, as there are only 9 ft. to drive to cut the Ludcott lode, which runs into this sett. The silver in Ludcott continues, and dips into North Trelawny levels.

CARDIGAN CONSOLS.—Some very fine specimens of lead and copper ores from this mine are to be seen at the Exhibition.

GOLD IN WALES.—It is stated that Mr. John H. Clement, whose long and successful experience in connection with gold mining in various parts of the world entitles his opinion to the utmost respect, has just started for Wales, to inspect some mining properties in the gold-bearing strata of the Clogau Mountain. The prospectus of the Cwmheelan property will be issued to the public in about a week, and several others are in course of formation. Amongst them is the West Clogau, which I believe is one of those to be inspected by Mr. Clement. This is rather a bold step on the part of the promoters, the mine, although in the Lower Silurian formation, being west of the Vigra Mountain—a district in which he publicly declared, after his examinations of the surface in 1845, 1846, and 1847, contained nothing beyond traces of gold. Pits are now down, so that he will be enabled to observe the probable change that will take place in depth, and it is upon this that the promoters rely. Of course, should Mr. Clement's report be favourable, it will have the greater weight. The East Clogau directors have quarrelled with Mr. G. F. Goble, and another manager has been engaged in his stead. The desire to embark in gold mining speculations is represented as very great at present—so great, indeed, that an effort is about to be made to bring out a Washoe Gold and Silver Mining Company, so that we may have quite a revival of the California gold mania ere long.

PROSPER UNITED MINES—"We went on to Prosper, and this is really a magnificent mine, and does the greatest credit to Capt. T. Richards. I am astonished to see what has been done there since you commenced, and I am glad to see the prospects so good. There is fine black ore going down in the winze ahead of the 40, and it is now turning to yellow. There is an immense quantity of tinstuff ready for stamping, and there will be good and regular samplings henceforth. I am much pleased with the mine, and hope it will soon pay."

CARDIGAN CONSOLS.—As stated last week, the prospects of this mine are excellent. The adit east is worth 35*l.* per fm., and the stopes in the back 25*l.* per fathom. Sinking to another level is commenced.

BROOKWOOD.—I saw in last week's Journal a paragraph relating to the mines of the Ashburton district. The writer seems to be well acquainted with the mines therein named, and I quite agree with him as to their improved prospects, now that the generality of them are being managed in an efficient and miner-like manner. The failure of the Queen of the Dart, and two or three other mines that may be named, was owing to their mismanagement. The Brookwood and Wheal Emma Mines appear to be at present thoroughly well managed; it is to be regretted that the latter mine was not always so. As to the former, the operations carried on in the mine are being prosecuted with the utmost vigour, and promise, ere long, to give splendid results in the shape of dividends to the shareholders. The sale of ore to-day I find is 50 tons, of first quality. There is a meeting of Wheal Emma to be held on the mine on Tuesday next. No doubt the shareholders will be highly pleased with the improved prospects of their property.

NORTH TRELAWNY.—This mine is attracting considerable attention in the neighbourhood, and is considered likely, ere long, to rival that of its rich and favourite neighbour, Wheal Ludcott, seeing it has a such a long run on the same lodes, which have turned out so productive in this mine. They are daily expecting to reach the lode in the 76, and, according to the official report from the mine last week, little doubt is entertained that it will prove highly remunerative, and amply repay the shareholders for their persevering patience and outlay.

A new mine appears in the Journal this day—EAST WHEAL FORTUNE, in 4096 shares, on the Cost-book principle. This mine is adjoining some of the finest mines Cornwall has ever seen, is intersected by the West Cornwall Railway, and very near the railway station at Marazion; it is held of Mr. Rogers, M.P. for Helston, at 1-18th dues, without rent. It is a very large sett, and there are already four lodes intersected by a shallow adit, all of which are producing good work for tin. As good wine needs no bush, so this apparently needs neither puffing nor concealment.

GURLYN continues to improve, and from present appearances bids fair to be in a very short time an extensive and valuable property. The extension of the 20 end east in Wheal Fox is draining the old workings below the adit in East Wheal Fox, a part of the sett that was partially worked about 80 years ago as a separate mine. Tributers are now working there, and they have discovered the lode left entire by the former workers for more than 200 fathoms in length, all good tin ground, and from which large quantities of tin can at once be raised. This long and apparently valuable run of tin ground will soon be opened out by the 10, 20, and 30 fm. levels east from the flat-rop shaft, and it may be regarded as a most important discovery. The cross-cut south from Wheal Fox will soon intersect Riche's lode, east of the cross-course, from which great things are confidently expected. This (Riche's) lode has been very productive in the western part of the mine, and having never been seen east of the cross-course, its intersection will be an interesting and important feature. It also crosses Wheal Fox lode some few fathoms east of the present 20 end. The mine is at present one of the most promising in the district, and daily improving.

NEW EAST WHEAL ROSE.—This property, situated near Newquay, in the parish of St. Colomb, Cornwall, on the estate of Sir R. Vyvyan, is about to be reworked by a cost-book company. Some years since the mine was partially developed by a London company, by whom operations were commenced on the north part of the sett in a valley, where they drove south about 250 fms. on the course of the north and south lode, which it appears produced several tons of fine lead ore, and presented appearances of a most promising character. Capt. John Jenkins (of Great Wheal Baddern), speaking of the property, says that there are five east and west lodes traversing the sett, in a very beautiful stratum of mineralised ground, being of a light blue decomposed killas, which is altogether congenial for silver-lead. There is also a north and south lode of a similar character, which will intersect the east and west lodes at a short distance east of the railroad. Capt. James Phillips (St. Colomb) considers that the north part of the sett—which, as before stated, was partially developed some time since by a London company—to be a very great feature, his opinion being that at a shallow depth good profits will be returned. Relative to the future development of the property, he states that it presents facilities of a very unusual character, for the whole of the lodes, some seven or eight in number, in soft ground, are close to each other; the railway passes through the property, and being but two miles from a seaport the land carriage will be very trifling. He adds, that it is in the best locality for lead in the county, close to the celebrated East Wheal Rose, the richest lead mine in the county, and that the character of ground and lode exactly resembles each other. The present company propose to sink a shaft for about 15 or 20 fms., near the junction of the lodes. This, it is thought, can be accomplished with a small engine; and it is also proposed to continue the adit in the north part of the sett, which has already been driven between 200 and 300 fms. By putting out a cross-cut from the shaft six lodes will be intersected, which will, it is hoped, produce the most satisfactory results. The undertaking will be divided into 4000 shares of 1*l.* each; the sum to be paid to the promoters for purchase and preliminary expenses is 3000*l.*, the remaining 1000*l.* to be devoted to the commencement of operations. The promoters have agreed to take 800 shares out of the 3000*l.* purchase money.

*** With this week's Journal we give a SUPPLEMENTAL SHEET, which contains—Mr. Phillips's paper "On Gold Mining, and the Gold Discoveries made since 1851," as read at the Society of Arts, with the Discussion thereon; the Beariz Tin Mining District; the Mining News from Australasia; Copper Mining on Lake Superior; the paper "On Winding," read at the Miners' Association of Cornwall and Devon, by Mr. J. Hocking, jun.; the Discovery of London Fires; Colliery Explosions; Steam-engine and Boiler; a New Steam Travelling Crane, &c.

We shall also publish a SUPPLEMENT with next week's Journal, which will enable us to give more details of the Metallurgy and Mineral Products at the International Exhibition than we have now space for; also to insert several papers now unavoidably omitted—among them Mr. Patterson's paper "On Coal, Geologically, Chemically, and Commercially Considered;" Mr. Rogers's paper "On Iron-making—Economy in Puddling—Utilisation of Waste Substances;" the Social Condition of Miners; the Improvement of Canal Navigation; on the Distillation of Coal, &c.

*** With the Journal of May 3 a SUPPLEMENTAL SHEET was given, which contains—Prof. Morris on the Principles of Geology—the Geology of the Border: two papers, by Messrs. E. F. Boyd and E. Gibsone, read at the North of England Institute of Mining Engineers—On Winding: by Mr. J. Hocking, jun., read at the Miners' Association of Cornwall and Devon—the North Staffordshire Coal Field: by Mr. John Bradbury, read at the Manchester Geological Society—the Geological Formation of the Earth: by Mr. N. Ennor, with engravings—Plan of the North Pool Mining District.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, May 16, 1862.

COPPER.	£	s.	d.	
Best selected....p. ton	101	0	0–	—
Tough cake..... „	98	0	0–	—
Tile ..... „	98	0	0–	—
Burra Burra .... „	95	0	0–	—
Copiapo ..... „		—	-	—
Copper wire .....p. lb.	0	1	0½	– —
ditto tubes ..... „	0	1	1	– —
Sheathing & bolts .. „	0	0	11	- —
Bottoms ..... „	0	11½	– 0	1 0
Old (Exchange) .... „	0	0	9¼	– —

IRON.	Per Ton.			
Bars, Welsh, in London..	6	5	0–	—
Ditto, to arrive	5	17	6–	6 0
Nail rods	7	0	0–	—
„ Stafford. in London	7	0	0–	7 10
Bars ditto	7	5	0–	8 0
Hoops ditto	8	5	0–	8 10
Sheets, single	9	0	0–	9 10
Pig, No. 1, in Wales ..	3	0	0–	4 0
Refined metal, ditto....	4	0	0–	5 0
Bars, common, ditto....	£5	2	6–	—
Ditto, merchant, in Tees	6	10	0–	—
Ditto, railway, in Wales	5	5	0–	—
Ditto, Swed. in London.	11	10	0–	12 0
To arrive	11	0	0–	—
Pig, No. 1, in Clyde....	2	8	0–	2 18
Ditto, f.o.b. in Tees ...		—	-	—
Ditto, forge, f.o.b. in Tees		—	-	—
Staffordshire Forge Pig.	3	10	0–	3 12
Welsh Forge Pig		—	-	—

LEAD.				
English Pig	20	5	0–21	10 0
Ditto sheet	20	10	0–20	15 0
Ditto red lead	21	10	0–21	15 0
Ditto white	28	10	0–30	0 0
Ditto patent shot	23	0	0–	—
Spanish	20	0	0–	—

BRASS.	Per. lb.
Sheets	10d.–11d.
Wire	9¼d.–9¾d.
Tubes	11d.–12¼d.

FOREIGN STEEL.	Per Ton.		
Swedish, in kegs (rolled)	—	-	—
„ (hammered).	15	10	0–16 0 0
Ditto, in faggots.....	17	10	0–18 0 0
English, Spring	18	0	0–23 0 0
Bessemer's, Engineers Tool	44	0	0– —
„ Spindle	30	0	0– —
QUICKSILVER	7	0	0 p. bottle

SPELTER.	Per Ton.		
Foreign	18	0	0– —
To arrive	18	0	0– —

ZINC.			
In sheets	24	0	0– —

TIN.			
English, blocks 114	0	0–	—
Ditto, Bars (in barrels)..115	0	0–	—
Ditto, Refined 119	0	0–	—
Banca 123	0	0	(nom.)
Straits 114	0	0–	—

TIN-PLATES.*			
IC Charcoal, 1st qun. p. bx.	1	7	6– 1 8 6
IX Ditto 1st quality „	1	13	6– 1 14 6
IC Ditto 2d quality „	1	4	0– 1 6 0
IX Ditto 2d quality „	1	10	0– 1 12 6
IC Coke ..... „	1	1	0– —
IX Ditto..... „	1	7	0– —
Canada plates ....p. ton	12	10	0–13 0 0
In London; 20s. less at the works.			
Yellow Metal Sheathing .... p. lb. 9d.			
Indian Charcoal Pigs } In London }	6	12	6– 6 15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The dulness prevailing last week continued during the earlier part of the present, and but few transactions of importance had taken place up to the last day or two, when considerable activity was manifested, chiefly in copper, in consequence of some of the orders limited to 10¼d., which have been in the market for some time, being taken by the smelters. In one or two other branches also the metal market wears a more animated appearance.

COPPER.—No alteration in fixed rates of English has followed the decline on March 3, since which the market has never been equal to quotations; sales were made almost immediately after the fall at 10¼d., the market then stiffened to 10½d., at which point most of the business of the month has been done. This price has been so steadily maintained that several Indian orders, limited to 10¼d., could not be placed until the last day or two, when sellers submitted to the concession, and contracts were passed at this figure for a large quantity. The price has now become a general one, and is pretty freely quoted. For cake, tile, and ingot there is but little enquiry. Foreign continues slow of sale, and, though quotations are about the same, business has been done at lower rates. Burra Burra sold at 94*l.* 10*s.*; Kapunda, 96*l.*; Chili, 86*l.*; Spanish, 88*l.* In yellow metal several orders have been placed at 8d., and even small lots are said to be obtainable at this price.

IRON.—Railway bars are in fair demand, and manufacturers tolerably well supplied with orders; price rules about 5*l.* 5*s.*, delivered on board ship in Wales. Merchant bars in rather more request; quotations firm, at 5*l.* 2*s.* 6*d.* at works, and 5*l.* 17*s.* 6*d.* to 6*l.* f.o.b. in London. In Staffordshire descriptions only best qualities are enquired for; prices unaltered. Swedish bars are difficult to move at 11*l.* ex ship, and 11*l.* 10*s.* from the warehouse; stocks moderate, and arrivals far from excessive. Good Indian assortments are scarce. Scotch pigs have fluctuated but very slightly during the week, the highest point reached being 53*s.* 6*d.* mixed numbers. Market closes 53*s.*, sellers.

SPELTER.—No improvement whatever is visible in the demand for this metal; there are now sellers at a reduction of 5*s.* from our last week's quotation—18*l.*, cash. This concession in price has not had the effect of bringing buyers into the market.

LEAD.—A good business doing in English pig, which has further advanced 10*s.* per ton, present quotations being 20*l.* 5*s.* for odinary soft quality, and 21*l.* 10*s.* for WB. The improved reports from China, by the last mail, have tended to stiffen our maket. Sheets and shot in limited demand, but quoted higher, in consequence of the advance in pig. Spanish pig is now quoted 20*l.*, and scarce.

TIN.—In English there is a decided increase in the demand, and sellers now adhere firmly to fixed rates. There is also more enquiry for foreign. Fine Straits advanced to 114*l.*, cash, a good business doing; Banca nominally quoted 123*l.*

TIN-PLATES are easier to buy; IC coke, 21*s.* Excepting for shipment to America there is but little demand.

STEEL.—No important change has taken place in Swedish keg or faggot, which remain dull.

NEW YORK, APRIL 24.—Since March 25 Government has paid out large amounts of Treasury Notes and Certificates of Indebtedness, and money is very easy, without material fluctuations in the foreign exchanges and gold. The latter is quoted at 1⅛ per cent. premium, and London 112 to 112½ per cent. Business has not been so much benefitted by the disbursements of Government as had been anticipated, but with the opening of the Western trade there is a little more doing. It is not yet decided what changes will be made in the tariff, nor has the tax bill been finally passed. This uncertainty, and the position of the armies in the South-West and Virginia, naturally create an indisposition to operate largely, either in buying or selling.—Tin has improved a little, under a steady demand for consumption: the sales of the last few days are 600 to 800 slabs Straits at 29*c.* to 29¼*c.*, and 400 to 500 slabs Banca at 31*c.* We quote Straits, 29¼*c.*; Banca, 30½*c.* to 31*c.*; and English, 28 to 28½*c.* The arrivals from Europe have continued, and amount to 2000 slabs Straits, 2900 Banca, and 2300 ingots English. From the East Indies, 1400 slabs are on the way. We estimate to-day's stocks at 9600 slabs Banca, 24,500 slabs Straits =34,100 slabs in Boston and New York, and about 80 tons English. The bulk of the stocks consists of the importations of the early part of 1861, and is not offered for sale. After having waited so long, the owners are still disposed to hold until the question of the duty is settled. Before this is done, it is impossible to judge of the future value of the article. The stock is large, and may still be increased by additional shipments from England, where prices had declined.—Spelter had declined to 5¼*c.* for Silesian, but has rallied a little: the business done has been of a retail character. We quote Silesian 5½*c.*, and Lehigh 5¾*c.* Stock of foreign, 1300 tons.—Copper: During the first half of the month the market remained lifeless, and no business whatever was done, while quotations declined to 21⅛*c.* and 21½*c.* At this price a demand for consumption sprang up, which was met from second hands. The Lake companies then decided to sell, and about 1,000,000 lbs. were sold by them at 21½*c.* There is still some enquiry, and with a decreased stock higher prices have been obtained. We quote Baltimore 21¾*c.*, and Lake 22*c.* The Baltimore companies do not offer their copper at the present rates. We have had several small lots of ingot returned from Europe, and at Boston there has been an arrival of 200 tons Chili, which is not offered for sale. Opinions are much divided in regard to the future course of the market. Some think that prices will rule very low when the fresh supplies, which begin to arrive towards June, come on the market; and others believe that the requirements of the Government and manufacturers will be sufficient to maintain at least present quotations. The supply for 1862 from Lake Superior is estimated at 13,000,000 lbs., of which 10,000,000 lbs. are likely to come East. The Baltimore smelters do not work to their full capacity. The duty of 2*c.* operates against importations from Chili, and the shipments on the way are estimated at 800,000 lbs.—Lead: With large arrivals and free sellers from shipboard, the prices of foreign declined to 6½*c.* and 6 3-16*c.* for common German, 6¼*c.* for Spanish, 6½*c.* for English, Stollberg, but have since again improved, and we quote to-day common German 6¾*c.*, and the other kinds dull at 6¼*c.* The white lead manufacturers have bought very little of 2800 tons for the month our stocks do not exceed those of the end of March. We estimate them at 3700 tons, and the shipments from Europe at about 4200 tons. Of domestic lead there is no stock of consequence; a small lot of galena was sold yesterday at 6½*c.*—WINTERHOFF AND CO.

The business transacted in the MINING SHARE MARKET during the past week has been almost unprecedented in amount, and an extraordinary change has taken place in a few of the favourite mines; the demand on the part of *bona fide* investors being such as to beat all market operations. The settlement of the fortnightly account, almost the heaviest ever known, took place on Thursday, and went off well. The chief demand has been for East Caradon, East Carn Brea, Wheal Grenville, East Wheal Grenville, Devon Consols, Central Minera, Merllyn, North Treskerby, Wheal Union, North Trelawny, North Roskear, West Rose Down, Tincroft, Stray Park, North Basset, East Grylls, North Downs, Gonamena, Mary Ann, Wheal Uny, Carn Camborne, Wheal Unity, East Basset, and several other mines. East Caradon shares have reached 47, and leave off 45¾ to 46¼; the rise has been equal to 24,000*l.* in the week, and there is little doubt the shares will reach 50*l.* when the lode is met with in the 70 fm. level and in reference to this point, we may observe that the ground in the cross-cut is exactly similar to that driven through in the 50 and 60 fm. levels before the productive lode was met with, which augurs well for the 70. The latest report of the agent values the 50 east at 40*l.* per fm.; the 60 east, 60*l.* per fm.; the new lode, in the 50 east, saving work; the 60 east, poor; the 60 west, 20*l.*; Fawcett's lode is unproductive. East Carn Brea shares have reached 16¼, and leave off 16¼ to 16⅜; the latest report states that, in consequence of the accident to the engine, the only level to report upon is the 40, east of the cross-course, which will produce 4 tons of ore per fm. The agent hopes to have the water out of the mine by Monday. Great South Tolgus, 5⅜ to 5⅝; the lode at Lyle's shaft is worth from 40*l.* to 50*l.* per fm.; in the 140 east from 70*l.* to 80*l.* West Basset, 11¼ to 11⅝; the 114, west of Percy's shaft, is 2 feet wide, worth 1¼ ton per fm.; the 104, east of Grenville's, 4 tons per fm. Wheal Grenville shares have been dealt in to a very large amount, up to 6¼, 6⅜, and leave off 6¼ to 6⅜. In our article, on May 3, we called special attention to the excellent prospects of this mine, and there may be a considerable further rise next week, if it continues to progress as at present. During the past week the mine has been inspected for members of the Stock Exchange (who have been buying largely), and the report more than bears out all that we have ever expressed, and states that in a few months the mine will be in a position to pay dividends. On Thursday, 37 tons of tinstuff were sampled from the new, or East Grenville, lode. East Grenville shares have advanced from 1¼ to 2¼, 2⅜, and in great demand. Wheal Union shares in demand, at 3 to 3¼. Wheal Basset, 94 to 96.

Wheal Ludcott shares advanced to 8, 8½, but suddenly declined to 7⅞ and leave off 7¼ to 7½; in another column will be found a letter from Capt. Knapp, which, while it complains of our remarks of last week, offers no explanation of them, gives no detailed report of the mine, but enters into a rambling, desultory statement, the general correctness of which may, perhaps, be estimated by the following extract:—"Two years and nine months ago we commenced making profits, and *paying dividends* to the extent of 1000*l.* *and upwards quarterly*, and have continued, with but *one* exception, *with undeviating regularity at that rate* to the present time." The shareholders will be rather surprised at this, for on reference to the accounts we find that the mine commenced dividends in September, 1858, and has never, *in any one quarter, paid more* than 960*l.*, and *ceased* paying in *October*, 1861. But this, however, has nothing whatever to do with our remarks of last week, though, in reference to a further question in Capt. Knapp's letter, "Have not the meetings been *regularly held every quarter*, and an abstract of the accounts, &c., sent with business regularity to every shareholder?" We may answer distinctly, No! The usual quarterly meeting in 1861 was held on *March* 26. The regular period for the quarterly meeting in 1862 was also in March, but it was deferred to *April* 15. And mark the result: at this meeting the costs were only charged up to the *end of January*, but by deferring the meeting, sales of ore to the aggregate amount of 2386*l.* 4*s.* 10*d.*, and sold after the meeting should have been held—March 27, April 3 and 10, *were credited*, while the January and March costs, at least 2500*l.*, remained a liability, though not given in the accounts! All we complained of, however, was that no official report *had of late* been furnished to the Journal, as a guide to the shareholders or to account for the great and sudden rise from 3*l.* to 8*l.* in the shares. Capt. Knapp is still silent as to whether any discovery has been made beyond the silver (of which little was said in the report to the meeting) to account for the rise, and one reason for asking the question was, it has been the common talk of the market for some time that in March last the mine was inspected for a London shareholder, who, upon the report relating to the discovery, sold out a large interest at 3*l.* 2*s.* 6*d.* per share, and since that time no official report to account for the great change has been published. We think, therefore, we have been fully justified in the remarks we made, and regret that they have not brought out a more satisfactory reply. Alfred Consols, 3*s.* to 5*s.*; Carn Camborne, 12*s.* to 13*s.*; Clifford Amalgamated, 30 to 31; Cook's Kitchen, 33 to 34; East Basset, 42 to 43; East Russell, 2⅞ to 3⅛; Grambler and St. Aubyn, 14 to 16; Great Rosewlack, 10*s.* to 12*s.* Great Wheal Fortune shares leave off 25¼ to 26¼. North Roskear, 22 to 23, and in demand; at the meeting, held on Tuesday, the accounts showed a balance against the adventurers of 162*l.* 7*s.* 7*d.*; the report states that the water is again drained to the 194, and the end is to drive at 9*l.* 10*s.* per fathom; the 184 west is worth 20*l.* per fathom, and is now about 8 fms. from Pearce's shaft, which will be commenced sinking in about two months. This shaft was sunk through a rich course of ore which will be available when the shaft shall have been drained by the 194, and is the point to which we called attention, just before the accident, but for which, would have been accomplished ere this. Herodsfoot, 35 to 38½; Hingston Down, 2½ to 2¾; Marke Valley, 10 to 10½. North Treskerby shares have advanced to 27, 28. Providence Mines, 40 to 42. Rosewall Hill and Ransom United, 3½ to 3¾.

Gonamena shares have been in good request, but none offering; 17*s.* 6*d.* to 20*s.* The shaft is being sunk rapidly in good ore ground, and the cross-cut west is within 6 fathoms of the ground going down from the level above. A cross-cut is also going north to cut the Marke Valley lode. West Rose Down lodes. Sortridge Consols, 10*s.* to 11*s.*; South Caradon, 340 to 345; South Frances, 95 to 100; South Tolgus, 49 to 51. North Downs shares have been more dealt in, and leave off 4¼ to 4½; as the meeting a dividend of 2*s.* 6*d.* per share was declared. The profit on two months was 758*l.* 9*s.* 4*d.*, and the balance in hand 1464*l.* 17*s.* 11*d.* The report is favourable, and 233 tons of ore were sampled on Wednesday. Wheal Grylls, 33 to 35; the 30, east of Annie's engine-shaft, is worth 30*l.* per fm. The stopes in the back are worth 20*l.* per fm. The adit end is worth 20*l.* per fm. Merllyn shares have been pretty extensively dealt in, at 17*s.* 6*d.* to 22*s.* 6*d.*; the shaft will be down to the 20, on new lode, in about a month, when it is expected the mine will pay its way. Strong Park shares have been more in request, at 32 to 33. Tincroft shares also in demand, at 11¼ to 11½; South Caradon Wheal Hooper, 19*s.* to 25*s.*; Tolvadden, 3⅛ to 3⅜; West Caradon, 34 to 36; Rosewarne United, 17 to 19; at the meeting the accounts showed a balance against adventurers of 1318*l.* 11*s.*, and a call of 2*l.* 11*s.* 6*d.* per share was made. The mine is poor, but there are some good points to come off. At West Frances the accounts showed a balance of 90*l.* 4*s.* 11*d.* in favour of the mine, and a call of 2*l.* per share was made. West Rose Down, 15 to 16. Wheal Unity shares have been dealt in, at 12*s.* 6*d.* to 13*s.* 6*d.*; at the meeting on Tuesday, a call of 3*s.* per share was made. The liabilities over assets amounted to 847*l.* 11*s.* 4*d.*, and the report shows one or two points in progress. Wheal Kitty (Lelant), 12 to 13; Wheal Kitty (St. Agnes) shares have advanced to 37*s.* 6*d.* to 40*s.* Wheal Mary Ann, 10½ to 11; Wheal Seton, 126 to 128; Wheal Trelawny, 15½ to 16½; Wheal Uny shares in demand, at 7⅞ to 7⅞. Devon Great Consols, 440 to 450; at the annual meeting the reserves of the mine were estimated at 65,780 tons, which, at 5*l.* per ton, is worth 328,900*l.*—other assets making the total 427,526*l.* 11*s.* 6*d.*, showing resources, as the directors observe, of which few mines can boast. West Seton shares have advanced to 270, 280; branch has been cut in the 100 cross-cut south worth 1 ton of rich ore per fathom. North Basset shares rose on Friday from 3 to 4¼, 4⅜, on the report of some improvement, but we have no official intelligence.

On the Stock Exchange there has been very little business in Mining

ares during the week. The following prices were officially recorded British Mining Shares:—East Caradon, 43⅛, 44⅛, 46½, 47; East Carn a, 14⅛, 15, 17, 16½, 16¾; West Caradon, 34¼; East Basset, 44¼, 45; eat South Tolgus, 5¼, 5, 5¼; Grenville, 5, 5¼, 5⅛, 6¼, 6; Herodsfoot, 40; rth Wheal Basset, 3, 3¼, 3⅛, 3½; Providence, 41¼, 40½; Stray Park, 31½; heal Kitty, 11. In Colonial Mining Shares the prices were:—Bon ord, ½; Dun Mountain, 1½; General, 23¼, 23½, 23½; Great Northern pper of South Australia, ⅛, ⅛, ¼; Port Phillip, 1, 1⅛; Scottish Austra- 1⅛. In Foreign Mining Shares the prices were:—Santa Barbara, 1, 1⅛; St. John del Rey, 60¼, 60½, 59½, 60; Fortuna, 3, 3½; Linares, 7⅛; United Mexican, 7⅛, 7⅛, 7⅛; East del Rey, 1⅛.

The closing quotations for shares in new undertakings were:—Ocean rine Insurance, 8¼, 8⅝ prem.; Thames and Mersey Marine, 1⅛, 1⅜ pm.; iversal Marine, 2⅛, 2⅜ dis.; London and Provincial Marine, par to ⅛ m.; Mercantile Fire, ⅛, 1 prem.; Commercial Union, ⅛, ¼ dis.; Imperial nk, ⅛, ⅛ prem.; Alliance Bank, 2¼, 2⅜ prem., ex the new shares; Char- ed Bank of British Columbia and Vancouver's Island, par to ⅛ prem.; ian Irrigation, ⅛, ⅛ prem.; Metropolitan Wagon, 2, 2½ prem.; Lon- and Brazilian Bank, 1⅛, 1⅜ prem.; Oriental Commercial Company, ⅛ prem.; Bombay Gas, ⅛, ⅛ prem. Transactions were also reported in a Copper at ⅛, ¼ prem., business done at ⅜.

IRISH MINE SHARE MARKET.—Business in these securities has been ther slack since our last notice. The greater portion of the few trans- ions which have taken place was done in Mining Company of Ireland res, which remain in demand at last week's quotation, of 17*l.* 2s. 6d to *l.* 5s. Wicklow Copper shares have further advanced, from 47*l.* to 48*l.*, l are in request, showing that any observations on the excellent pro- cts of the Wicklow Copper Mining Company are well founded. On other hand, the General Mining Company for Ireland shares have fallen m 5*l.* 7s. 6d., flat, to 4*l.* 10s., proving that after all a certain limited ue of Dublin speculators in mines requres something more substantial n their own good reports on their mines to keep the shares at a price beyond their real value. Connorree shares also gave way, and remain sale at 30s. 6d., and Carysfoot are weak at par (20s. paid). The Coal ning Company, Ireland (Limited), has issued its report for the half- r, signed by Mr. George M'Dowell, Chairman, stating that the opera- ns of the company have been confined to the development of their col- ies at Walfhill and Killenaale; and that the produce of coal and culm the half-year has been 3079 tons at Walfhill, and 3268 tons at Kil- nale, all sold, leaving a nett profit for the six months of 248*l.* 3s. 3l.; ich the directors recommend to add to the reserve fund, which would m amount to 428*l.* 14s. 5d. The Mining Interest of Ireland is greatly quieted by Mr. Adderley's proposition, in the House of Commons, to orporate the Museum for Irish Industry with the Royal Dublin Society. atever the political or other motives may have been for the establish- nt of the former, it nevertheless remains a fact that the sphere of use- ess of these two institutions is as distinct, though not on the same scale that of the British Museum and the Geological Museum and School of nes, in Jermyn-street. The Museum of Irish Industry has done more promote mining in Ireland than the Dublin incorporated society can pretend to accomplish; and the scientific distinctions of its talented ers are of the highest order. The institution has acquired by its use- ess for the industry of this country such an importance, that it certainly ves a director who will give it his undivided personal attention. Our e will not permit us to say more on this subject at present.

At the Swansea Ticketing, on Tuesday, 2831 tons of ore were sold, rea- ng 33,036*l.* 10s. The particulars of the sale were—Average standard, *l.* 12s.; average produce, 13 9-16; average price per ton, 11*l.* 13s. 6d.; ntity of fine copper, 384 tons. The following are the particulars of the s during the past month:—

ate.	Tons.	Standard.	Produce.	Price per ton.	Ore cop.
15	2115	£104 4 6	12⅞	£11 4 0	£87 0 0
29	2132	102 2 0	14 5-16..	13 7 6	86 10 0
13	2831	102 12 0	13 9-16 .	11 13 6	86 1 0

pared with the last sale there has been a very slight decline. Compared h the corresponding sale of last month the decline has been—in the stand- 1*l.* 1s., and in the price per ton of ore about 3s. Of the 2831 tons of ore on Tuesday, 1228 tons were from British mines, which gave an average duce of 12½, and sold at an average standard of 104*l.* 4s. 6d.=10*l.* 8s. per of ore. The remaining 1603 tons were foreign ores, which gave an rage produce of 14⅛, and sold at an average standard of 101*l.* 12s. = *l.* 13s. per ton of ore. On May 27 there will be offered for sale 2445 tons re, from California, Cobre, Berehaven, Cuba, Springbok, Wheal Maria, kip, Bathurst, Knockmahon, Ballycummisk, Seville, Connorree, Tig- y, Yudanamutana, and elsewhere.

At the Devonshire Great Consolidated Copper Mining Company meet- on Thursday (Mr. W. A. Thomas in the chair), the accounts for the year ending n I were presented, showing a credit balance of 18,963*l.* 7s. 5d., after payment of idends during the period amounting to 44,032*l.* (43*l.* per share). The company had 8000*l.* worth of Exchequer Bills in hand. The balance of assets over liabilities was 34*l.* 11s. 6d. During the year the company has received 3s. 6d. less for their ores e produce being the same), but against this the cost of bringing the ore to market been reduced to the extent of 3s. 11½d. Capt. Richards presented an elaborate re- from which it appears that the reserves in the mines amount to 65,720 tons, worth, ton, the average price of actual sales, 328,600*l.* The directors have esta- a school on the mines, which is attended by upwards of 60 children. Details nother column.

At the Minera Mining Company meeting, on April 29, the directors a dividend of 5*l.* per share, from the profits of the Lady-day quarter.

At Cook's Kitchen Mine meeting, on May 9, the accounts for the four hs ending Feb showed—Balance last audit, 84*l.* 7s. 4d.; black tin and copper ore and sundries, 6350*l.* 7s. 7d.=6634*l.* 14s. 11d.—Mine cost, merchants' bills, and sun- 5735*l.* 5s. 4d.: leaving credit balance, 899*l.* 9s. 7d. The profit on the four months' ing was 815*l.* 2s. 3d. A dividend of 85*l.* 10s. (7s. per share) was declared, and 19s. 7d. carried to credit of next account. Capts. Charles Thomas, S. Davey, and homas, jun., reported upon the various points of operation.

At North Downs Mine meeting, on Wednesday, the accounts showed a balance of 1464*l.* A dividend of 750*l.* (2s. 6d. per share) was made.

At North Roskear Mine meeting, on Tuesday, the accounts for the two ths ending March showed—Mine cost, merchants' bills, and sundries, 2967*l.* 18s. 3d. nce last audit, 1177*l.* 10s. 1d.; copper ore sold, 1201*l.* 5s. 9d.; tin ore, 1409*l.* 9s. 6d.; ries, 77*l.* 8s. 4d.: leaving debit balance, 162*l.* 7s. 7d. Capts. Vivian, Angove, and ing reported upon the various points of operation.

At Yarner Mine meeting, on May 9 (Mr. John Divett in the chair), the nts showed—Balance last audit, 369*l.* 8s. 5d.; mine cost, merchants' bills, and sun- 1338*l.* 16s. 7d.=1908*l.* 8s.—Calls received, 672*l.* 7s.; ore sold, 567*l.* 15s. 4d.: leav- debit balance, 668*l.* 2s. 3d. Capts. Hampton and Barkell reported that the engine- is nearly up, and arrangement must be made to attach the present pitwork to the ne by flat-rods from one to the other; cheap second-hand 2½-in. iron rods can, ices, be obtained for this purpose if necessary.

At Wheal Unity Consols meeting, on Tuesday, the accounts showed a balance of 847*l.* 11s. 4d. A call of 3s. per share was made. The calls unpaid unt to 34*l.* 15s. 6d., which are to be paid prior to the 20th inst., or the shares will forfeited. The liabilities include merchants' bills, 1600*l.*; Mr. Michell, for boiler, ; cost and expenses of lease of new ground, 75*l.* The machinery and pitwork are king well, and the additional boiler is effecting a saving in the consumption of coal.

At the Deep Level Mine meeting, yesterday (Mr. R. Wilson in the), the accounts showed a balance of assets over liabilities of 146*l.* Messrs. E. Cooke Lankshear were appointed directors, and Mr. T. P. Thomas was appointed ging director.

At the North Phœnix Mine meeting, on Tuesday, the accounts for four ths ending March showed a credit balance of 151*l.* 13s. 9d. The cost for the next months was estimated at 550*l.* A call of 3s. per share was made.

At the Cwm Brane meeting, on Wednesday (Sir J. Walmesley in the , it was resolved that Messrs. J. Walmsley, Joseph Bartram, J. R. Pike, and T. S. ll were appointed directors. Mr. T. P. Thomas was appointed managing director, C. W. W. Thomas was appointed secretary. Messrs. D. Jones and Co. (of Llan- ry) were selected as the company's bankers.

At the North Minera Mine meeting, yesterday (Mr. T. P. Thomas in hair), the accounts showed a balance of assets over liabilities of 2348*l.* The report the manager having been read, the Chairman said there was no doubt that the Red e in Minera, ran through Central and North Minera, in which case both those pro- ties would be considerably increased in value. He hoped from the present time to be in a position to make monthly profits. The machinery was complete, the buildings erected, and the dead work, he trusted, was for the present at an end. In about months they would communicate the eastern workings with the western, or Pugh's. ings, when the ore would be taken away at a much less cost than before had been done. The eastern workings were not only very productive, but the ground was very easier than at Pugh's. Mr. Batters enquired whether there was any truth in the ur that a very good discovery of coal had been made in an adjoining property, and ther that seam or other seams entered the eastern part of the North Minera sett? Chairman replied that such was the case, and the proprietor of the coal mine had to him (the Chairman) to ask him to be allowed to sink a pit in the North Minera be expected to find coal there very shallow. Coal had been raised from their as well as from the Minera sett. In the Mold district some of the largest deposits had been found abutting on the coal formation, and therefore the fact that coal seam cropped up into the eastern portion of North Minera was in no manner preju- By the sale of coal from the neighbouring property it was thought probable suf- profits would be realised to pay for working the lead. He hoped at the next ing to be able to give a much more favourable account of the mine than at present. E. Cooke said he had inspected the mine several times, and, although he had somewhat disappointed at the returns, still he had not lost faith in North Minera. report and accounts were received and adopted. Messrs. H. Milford and J. Walmsley were appointed directors for the ensuing year. In consequence of the heavy expenditure incurred in machinery, and the hereunto unremunerative character of the stratification, it was resolved that the Marquis of Westminster should be memorialised to sanction a reduction of the dues. A vote of thanks to the Chairman terminated the proceedings.

At Rosewarne United Mines meeting, on Monday, the accounts for the four months ending March showed—Balance last audit, 33*l.* 11s.; mine cost, merchants' bills, and sundries, 2898*l.* 11s. 5d.=2932*l.* 2s. 5d.—Copper ore sold, 1400*l.* 6s. 6d.; tinstuff sold, 213*l.* 4s. 11d.: leaving debit balance, 1318*l.* 11s. A call of 2*l.* 11s. 6d. per share was made. Capts. Richards, Woolcock, and Carthew reported upon the various points of operation. The breaking of copper ore was impeded by the accident to the St. Aubyn engine which occurred on Jan. 15 last.

At South Minera Lead Mining Company first annual general meeting, held at the Queen Hotel, Chester, on April 28 (Mr. Thomas Dixon in the chair), the balance-sheet (as already circulated among the shareholders) was taken as read, and Mr. Taylor, the engineer of the company, read his report. A call of 10s. per share was made. Sir E. S. Walker and Messrs. T. Dixon, E. C. Walker, W. Keates, A. Eyton, and B. Hall, the several directors who retire under the provisions of the articles of association, were re-elected; and Mr. W. Sager was elected a director in the place of Mr. A. O. Walker, who is disqualified. Mr. John Bury was elected auditor of the company for the year ensuing, at a salary of 3*l.* 3s.

At East Rosewarne Mine meeting, on Thursday, the accounts showed a debit balance of 102*l.* 14s. 1d. A call of 1s. per share was made. Details elsewhere.

At the St. Day United Mines meeting, on May 9 (Mr. J. Balster in the chair), the accounts, made up to the end of March, showed a debit balance of 12,007*l.* A call of 8s. per share was made. Details in another column.

At the English and Canadian Mining Company meeting, on May 8 (Mr. A. Morrison in the chair), the accounts showed that the company were indebted to the amount of 6660*l.* 16s. 4d., of which 3000*l.* is a loan, bearing interest at 8 per cent. To meet these claims the company has its freehold estate in the colony and personal property (including plant and stock at mines and cash in hand), 2695*l.* 7s. 10d. Details will be found in another column.

At the Seend Iron Company meeting, on Thursday (Sir R. W. Carden in the chair), it was stated that the cost of production of the iron has exceeded the calculations, but this circumstance is at once accounted for by the fact that one furnace only has been worked, with a staff and expenditure in labour, &c., sufficient for two. The quantity of ore consumed being less than half its minimum quantity on which royalty is payable has more than doubled the charge on the iron made up to this time. The company are bound by a covenant in one of their leases to erect a third furnace by the end of June next, and an advantageous contract has been made for its erection. In the month of March last the superior landlord (Mr. Locke) of the lands from which the ore was raised brought an action of ejectment in consequence of the royalties not having been paid, and as the company were not under any liability to Mr. Locke they did not defend the action. Mr. Locke has, therefore, recovered possession of these lands. The directors are now in treaty with him for a new lease on more advantageous terms.

At the Beariz Tin Streaming Company (first general) meeting (Mr. J. Walker in the chair), a satisfactory report was presented by the directors, who state that in consequence of it being unnecessary to prosecute any heavy underground workings, or to provide the property with expensive machinery, it was confidently anticipated that no further calls would be required. The report of the directors, and the details of the meeting, appear in another column.

LEEDS, MAY 16.—Only a small amount of business has taken place in Mining Shares during the past week, but prices have been very firm. The following shares have been dealt in—Brea Consols, Cornubia, Wensleydale, and North Hallenbeagle. At a meeting held, on Thursday, at the offices of the last-named company, it was unanimously resolved to increase the capital.—EDWARD BROOK, 5, Bank-street, Mining Broker.

LEEDS, MAY 16.—In Mining Shares little animation has been exhibited: business continuing depressed, transactions are, consequently, limited in character. Quotations remain heavy and depressed.—JOHN GLEDHILL AND CO.

Mr. Joseph Tregoning has been appointed by the Stannaries Court official liquidator of the New Wheal Vor and East Wheal Metal Mining Company.

Mr. Myles Fenton, assistant traffic manager of the Lancashire and Yorkshire Company, and formerly secretary of the East Lancashire Company, has been appointed manager of the Metropolitan Railway.

RISCA COAL AND IRON COMPANY.—The Master of the Rolls has made a further call of 75*l.* per share on the contributories of this unfortunate concern.

COAL MARKET.—On Monday, the arrival of 44 fresh ships, with the prospect of a large increase next day, caused a dull market for house coal, and first-class sorts submitted to a reduction of 6d. per ton; seconds remained stationary. Hartley's were in request, and prices 3d. per ton higher; manufacturers' without alteration. Best house coals, 15s. 6d. to 16s. 6d.; seconds, 13s. 6d. to 14s. 6d.; Hartley's, 14s. to 15s. 6d.; manufacturers', 11s. 6d. to 13s. 6d. per ton.—On Wednesday, the north-east wind sent the large number of 181 fresh ships up this morning, which produced a little heaviness in the market, but the factors did not press sales, and a fair amount of business was transacted, at Monday's prices, for all descriptions of coal.—On Friday, 41 arrivals. The tone of the market was dull, and the amount of business done trifling, at last prices for all kinds of coal. Hetton Wallsend, 16s. 6d.; South Hetton Wallsend, 16s. 6d.; Eden Main, 15s.; Bebside West Hartley, 15s. 6d.; Lambert's West Hartley, 15s.; Tanfield Moor, 12s. 6d. per ton: 47 cargoes unsold; 60 ships at sea.

THE METAL TRADE—*(from a Correspondent).*—If we may judge from statistics of the Banca Tin Stocks, the tin trade is in a less favourable position than it has been at the corresponding season for several years. The arrivals in Holland towards the next sale amount to fully 3500 slabs above those at the end of April last year, though last year the quantity was considerably above that of the two preceding years. At the present time, again, the stock in London is just twice as much as in 1861. There is now a moderate demand, but the question is whether it will compensate for the large stocks at disposal. In New York, according to the last advices, the prospects are not more assuring; and, indeed, with regard to the Metal Trade generally, the same remark will apply. The stocks of antimony continue large, but prices, in anticipation of a duty to be put on the metal, are stiffening. It is anticipated that the yield of copper from the Lake mines for the season will be 5000 tons.

THE OTEA COPPER MINING COMPANY (LIMITED).—The prospectus of this company has been issued during the week, and a copy of it will be found in our advertising columns of to-day. The mine is situate on the Great Barrier Island, New Zealand, and has already yielded 30,000*l.* worth of ore. Capt. Josiah Holman has recently inspected it, and gives a very favourable report. He estimates that there is still available above the adit level alone 4000 tons of copper ore of full 15 per cent. produce, which, even at present low prices, is worth nearly 50,000*l.* He considers that if the mine improves in depth, as it has done in the 12 fathom level under the adit, its future value would be very great. It will be seen that unusual importance must be attached to the opinions and statements of Capt. Holman, from the very high testimonial in his favour by Mr. Humphry Willyams, the eminent copper smelter, who has known Holman for a great many years, and has employed him on many occasions, and in all parts of the world. Capt. Rowe also estimates that there are thousands of tons of ore that may be returned profitably, and considers that but a slight improvement is required in the lode to make this an exceedingly valuable mining property. A most important feature is that there is no land carriage, which is generally a serious drawback to foreign and colonial mines, while the freight in the wool ships to London varies from only 2s. 6d. to 12s. 6d. per ton. Looking at the considerable quantity of ore ground laid open, the peculiar advantages of position, the richness of the ore, &c., we have rarely seen an undertaking of greater merit and attractions brought before the public. There are 25,000 shares of 2*l.* each, 5s. to be paid with application, and 5s. on allotment, and no further call to be made for at least 12 months. The direction is composed of gentlemen of the highest respectability, and of acknowledged position. We may add that specimens of the ore may be seen in the New Zealand department of the International Exhibition.

THE GILVACH COAL COMPANY (LIMITED).—On Thursday the directors of this undertaking held a board meeting at their offices, Laurence Pountney-lane, City, and after the usual routine business was transacted a very lucid and highly satisfactory report of the company's mining engineer (Mr. Arthur O. Davies) was read, graphically descriptive of his discovery of the "Gilvach Main Coal," in the course of one week's exploration in a free drainage level, the site of which was stated therein to be on the side of the Extension of the Ely Valley Railway, already surveyed by Mr. H. Voss, C.E., the resident engineer of the Great Western Railway Company (the proprietors of the line). This trial opening of the engineer's discovered the existence of an old level, of which on the surface there was barely indication, and in all probability the entrance thereto has been closed by debris, and overgrown with grass and heather beyond a period of half a century; it is found to be driven 5 chains into the hill, and is left in virgin coal of unusual hardness and excellent marketable quality; the seam is one block 4⅛ feet thick, with a few inches of soft pricking beneath, so that the miner will not break the bottom of the coal in the process of holing. As a proof of the great superiority of the roof and floor of the vein, the engineer states that not a stone of the ore has deflected or fallen, neither is there the least indicative approach to upheaval or "creep" in the other; nor have the sides of coal in the heading "stronged," or exfoliated. The plane of the coal lies nearly horizontal, the little rise there is in it being in a direction north-east, and at a gradient of one in thirty-six, or thereabout. With a companion or parallel level driven along the northern boundary about 400 yards from the other; the whole of this valuable seam of coal under Gilvach Mountain can be wrought and ventilated without the adventitious aid of machinery or other auxiliary appliances; and as this seam is perfectly free from fire-damp, men and horses may walk in and out of the colliery fearless of danger. From the unparalleled success attending this company's first essay at mining, and the highly respectable and experienced gentlemen forming the directorate, there is little doubt but that with ordinary management Gilvach will become one of the most remunerative concerns launched (under the Acts limiting the liability of shareholders) in the metropolis this year, and heartily we wish them the success they deserve.

THE SURVIVORS OF THE LATE HARTLEY CALAMITY.—The survivors of the calamity at Hartley have made out a claim which the Hartley Sinkers' Fund committee can, we think, hardly allow to go unheeded, particularly as they expect to have a balance in hand after presenting the testimonials to the sinkers and paying all necessary expenses. In a letter to a Newcastle paper, the survivors say—"The Hartley men were the first who entered the shaft and saved the lives of the three men who were got out alive. Those men were Thomas Watson (better known as the 'hero of the shaft'), Ralph Robinson, and William Sharp, who, no doubt, would have perished but for our exertions, as they were in such an exhausted state when we got them out; that was eighteen hours before Mr. Coulson and his men arrived. * * *. The Hartley men had got the shaft cleared of the debris, both at the High Main and up to the surface, and 24 fms. below the High Main, before Mr. Coulson and his men came. After they came the men were not allowed to go below the High Main seam any more, but we had to become their humble servants; but we never objected to go into the shaft, so anxious were we to save our fellow-beings who were suffering below; and the wages we received were 2s. 6d. per shift for labouring four, six, eight, and ten hours shifts, while Mr. Coulson's men received the same wages for two-hour shifts, and, besides their wages, were provided with provisions, which we were not; and, further, Mr. Coulson's men had their employment to return to, while we were thrown destitute by this sad calamity; and as all our work-tools were left in the pit, we were unable to renew our employment until we got fresh tools. * * *. We doubt not the public will think the Hartley men should have had an equal share with Mr. Coulson's men; but as it plainly appears it is not intended to give us our due, we have been led to lay this statement before the public. Mr. Coulson and his men are to receive their testimonials in the New Town Hall, on May 20; but we are informed by Mr. Hurst and Mr. Baker Forster that none of the Hartley men are to share in this distribution, or to have any testimonial from the fund raised 'for those who so nobly risked their lives' at Hartley on the occasion of the late accident."

CONVICTION OF A COLLIERY OWNER FOR NEGLECT.—On Wednesday, before the County Justices, at Ashton-under-Lyne, Mr. Thomas Shaw, owner of the Houghton Green Colliery, Denton, near Manchester, was charged by Mr. Dickinson, Her Majesty's Inspector of Mines for the Manchester district, with neglecting to provide sufficient ventilation, with neglecting to lock the safety-lamps used in the pit, and also with neglecting to provide a cover overhead whilst persons were raised and lowered in the shaft. Mr. Dickinson said he visited the colliery on the 2d instant, and found that the pit was upwards of 200 yards deep; that for about 60 yards at the bottom of the shaft there was no means of airing except by two small air-pipes, which were insufficient, and that the air throughout the greater part of the workings had a cap upwards of 1 inch in length on the flame, indicating the presence of a large and dangerous quantity of fire-damp. One of the safety-lamps was not even provided with a lock. With respect to the cover of the shaft, Mr. Dickinson gave notice in January that it should be furnished, and the notice had not been obeyed. The defendant was fined 10*l.* for the defective ventilation, and 5*l.* each for the other offences 20*l.* altogether, and costs.

SHOCKING COLLIERY ACCIDENT.—A most fearful accident occurred at Messrs. Love's Bitchburn Colliery, near Crook, Durham. It appears that the men had just got to work, when a large quantity of the upper seam of coal fell, burying three poor fellows. One of them saw the falling mass, and made a desperate effort to extricate himself, but, unfortunately, a large piece of earth struck him. The three men were killed.

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In my last letter I stated the weather for the week would be unsettled and windy; the weather has been in accordance with this prediction. The cool May I predicted is now upon us. For the coming week, the early part, on the whole, will be fine, but rather changeable, the latter part rather unsettled. Several persons have written me as to the harvest we are to expect; as to the crops, they will be good, but the weather during the harvest months will be somewhat changeable.

26, *Throgmorton-street, May* 16. G. SHEPHERD, C.E.,
Author of "The Climate of England."

LEAD ORES.

Sold on the 9th May.

Mines.	Tons.	Price per ton.	Purchasers.
Cargoll	90	£14 0 0	T. Somers.

Sold on the 15th May.

Isle of Man Mining Company	100	22 3 6	Treffry's Estate.

MAY 10.—WHEAL LUDCOTT adventurers sold SILVER ORES to the value of 1341*l.* 18s.

BLACK TIN.

Sold on the 1st and 3d May.

Mines.	Tons	c.	q.	lbs.	Price per ton.	Amount.	Purchasers.
Basset & Grylls	22	5	2	27	—	£1232 14 7—	—

Sold on the 10th May.

Gt. Wh. Vor	23	3	0	11	—	1556 8 7—	—
Penhalls	6	2	1	17	—	385 11 3—	Calenick.
Kitty (St. Agnes)	8	14	3	18	—	518 3 5—	ditto

Sold on the 13th May.

Brea Consols	3	13	1	23	69 7 6	254 15 11—	R. Michell & Co.
ditto	0	13	3	24	60 10 0	42 4 10—	ditto
ditto	0	6	0	9	41 0 0	12 9 3—	ditto

COPPER ORES.

Sampled April 23, and sold at Swansea May 13.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cobre	101	10⅜	£8 15 0	Cuba Ore	90	12 ..	£10 0 0
ditto	96	10¼	8 15 0	ditto	87	11⅜	10 3 0
ditto	94	10⅝	8 10 6	ditto	49	20¼	17 11 6
ditto	90	10¾	8 16 0	ditto	48	20½	17 9 0
ditto	52	20⅜	18 2 6	ditto	46	20¼	17 8 0
ditto	47	20¼	17 15 0	Precipitate	5	62	50 14 0
ditto	13	57	45 17 6	Gt. Northern	97	17	14 12 6
ditto	102	11	9 14 0	Mining Co. of	30	13⅜	11 17 0
ditto	92	11⅛	9 10 0	South Aus...	10	15	13 1 0
ditto	100	11⅜	9 7 0	ditto	9	22½	19 12 0
Knockmahon	119	10¼	8 13 0	ditto	6	20¼	17 0 6
ditto	67	12	10 7 0	ditto	5	18¼	16 0 6
ditto	66	12¾	10 17 0	ditto	2	36⅞	29 17 0
ditto	118	12⅞	11 2 0	ditto	1	29	22 0 0
ditto	63	14⅛	12 2 0	ditto	3	8⅜	7 14 0
ditto	93	13	11 4 0	Wheal Maria	57	23¼	20 14 6
Berehaven	128	10⅛	8 12 0	ditto	52	23⅜	21 7 6
ditto	81	10⅜	8 16 6	Ookip	26	28¼	25 7 6
ditto	100	9¾	8 5 0	Llandudno	67	2	1 1 0
ditto	36	9¾	8 5 0	ditto	37	1¾	0 16 6
ditto	100	11⅛	9 10 0	Mines Ryl Reg.	21	49	44 6 0
ditto	82	11	9 9 0	ditto	20	43¼	38 10 0
Cuba Ore	98	11⅞	9 19 6	British Reg	30	28¼	25 0 0
ditto	95	11⅞	9 19 6				

TOTAL PRODUCE.

Cobre	787	£8488 12 6	Wheal Maria	189	£2292 16 6	
Knockmahon	526	5552 12 0	Ookip	26	659 15 0	
Berehaven	827	4662 10 6	Llandudno	104	100 17 6	
Cuba	518	6160 18 0	Mines Royal Reg.	41	1700 6 0	
Gt. Northern (S.A.)	163	2368 2 0	British Regulus	30	750 0 0	

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Copper Miners' Company	280	£3329 6 0
Freeman and Co.	243	2344 4 0
P. Grenfell and Sons	397½	4173 1 0
Sims, Willyams, and Co	166½	3767 12 6
Vivian and Sons	668¼	7057 3 6
Williams, Foster, and Co.	583½	6078 9 0
Mason and Elkington	138	1896 3 0
Bankart and Sons	107	1397 14 6
Charles Lambert	52	1111 10 0
Sweetland, Tuttie, and Co.	128	1100 16 0
Jennings and Co.	67	780 10 6
Total	2831	£33,036 10 0

Copper ores for sale at Swansea, May 27.—Californian U 73, 68, 65, 61, 60, 47, 43, 39—Cobre 91, 90, 79, 75, 59, 50—Berehaven 104, 100, 118, 112—Cuba 100, 98, 90, 47, 50, 32, 20, 5—Springbok 55, 46—Wheal Maria 77, 22—Ookip 53, 9—Bathurst 52, 39, 9, 5—Knockmahon 81—Ballycummisk 30, 22, 18, 3—Seville Ore 25, 10, 8, 5—Connorree Precipitate 9—Cronebane 3, 2—Tigrony 3, 2—Glo'ster Slag 4—Slag 1—Yudanamutana 50, 3—Total, 2445 tons.

AVERAGES.

	Produce.	Price.	Standard.
British	12⅛	£10 8 0	£104 4 6
Foreign	14⅝	12 13 0	101 12 0
Sale	13 9-16	£11 13 6	£102 12 0

Totals—British, 1228; Foreign, 1603=2831 tons (21 cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	10 15-16	£ 9 7 0	£105 9 6
Foreign	19 1-16	16 14 0	99 7 0
Sale	14 5-16	£12 7 6	£102 2 0

Totals—British, 1251; Foreign, 881=2132 tons (21 cwts.)

COPPER ORES.

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 1883—East Caradon 445—Phœnix Mine 388—Marke Valley 383—Hingston Down 360—Great Wheal Martha 267—Holmbush 264—Lady Bertha 230—Bedford United, 208—East Wheal Russell, 186—South Bedford 157—Wheal Friendship 144—Yarner Mine 131—Wheal Emma 130—Kelly Bray 122—Gunnis Lake Clitters 119—Okel Tor 80—Brookwood 50—Gawton Copper 36—Fursden 34—Hawkmoor 30.—Total, 5647 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—West Caradon 606—Great Wheal Busy 534—South Caradon 448—Clifford Amalgamated 401—North Treskerby 339—Fowy Consols 306—Tywarnhaile 260—East Crinnis and South Par 250—North Downs 233—Craddock Moor 176—St. Day United Mines 139—Wheal Polmear 106—South Crinnis 97—Perran Mines 38—Burra Burra 35—Duchy and Peru 33—Wheal Rose 27—Wheal Jane 20—North Wheal Busy 19—Wheal Cupid 15—Falmouth and Sperries 13—Tredinnick's Ore 11.—Total, 4106 tons.

THE OTEA COPPER MINING COMPANY (LIMITED).

In 25,000 shares of £2 each.

5s. per share to be paid with application, and 5s. per share on allotment.

Under the Act of Parliament, each shareholder is liable only for the amount he has subscribed for.

DIRECTORS.

Col. BAZALGETTE, Chairman of the Great Barrier Land, Harbour, and Mining Company (Limited).
CHARLES MARTIN, Esq. (Messrs. Blogg and Martin), Bucklersbury.
PARKE PITTAR, Esq., (Messrs. P. Pittar and Co.), 26, Gresham-street.
JOSEPH THOMPSON, Esq., 43, Gloucester-terrace, Hyde-park.
PHILIP WRIGHT, Esq., late of Auckland, New Zealand.

SOLICITORS—Messrs. Bischoff, Coxe, and Bompas, 19, Coleman-street, E.C.
CONSULTING MINING ENGINEER—Messrs. Phillips and Darlington, Moorgate-street Chambers, Moorgate-street, E.C.
BANKERS—Bank of London, Threadneedle-street, E.C.
AUDITORS—To be appointed at the first general meeting.

BROKERS.

London ..... Messrs. J. C. and C. W. Morice, 1, Warnford-court, E.C.
Manchester ..... J. Gorton, Esq., Newmarket Chambers.
Aberdeen ..... H. C. Oswald, Esq., Marischall-street.

SECRETARY AND OFFICES.

J. H. MURCHISON, Esq., 117, BISHOPSGATE STREET WITHIN.

The object of this company is to purchase and work a copper mine, situate on the north of the Great Barrier Island, New Zealand, at present the property of the Great Barrier Land, Harbour, and Mining Company (Limited).

The operations hitherto carried on have been on a limited scale, and chiefly above the adit level; nevertheless, nearly £30,000 worth of copper ore has been sold from the mine.

To supply the necessary machinery, and to open out the mine properly, so as to yield remunerative results, demands more capital than the Great Barrier Company is in a position to lay out, that company requiring its resources for the development and improvement of its large estate.

At the office can be seen the reports and letters of experienced practical authorities, three of whom have recently carefully inspected the mine. Capt. Holman estimates (in his report of 21st March, 1861) that there are probably "over 3000 tons of ore, fully 15 per cent. for copper, available" above the adit level. In his letters of 28th May and 27th November, 1861, he increases his estimate of the probable yield of this ore ground to 4000 tons, if the powerful crusher he recommends be erected.

The lode has been sunk upon for 20 fms. under the adit, and Capt. Holman says that "if only a permanent increase in the yield of ores takes place throughout the vein—such as seen in the 12 fm. level, where the quality of the ores is quite equal to the general shipments—the future value of the mine would be very great."

Capt. Holman also remarks that, in working the mine, "the materials required will be few in number; steel for borers, with powder and fuze, include the chief items for quarrying. On the dressing-floors, steel hammers and sledges, with riddling and jigging sieves. For the crusher, the usual wearing parts; whilst for the engine wood is abundant and easily procured."

The value to be attached to Captain Holman's statements and opinions can be inferred from the very high testimonial in his favour by Mr. Humphry Willyams, the well-known copper smelter, given at the end of this prospectus. It will be seen that Mr. Willyams expresses himself in strong terms, founded on his knowledge of Capt. Holman for many years, and his employment of him on many occasions in all parts of the world.

Capt. Rowe states that "the shaft, which has also been sunk on the course of the lode, has throughout been in grey ground of more than average quality. The level (12 below adit) has been driven in a zig-zag direction, and whenever it has intersected the lode the ground has been of the usual character, but beyond the point where it communicates with the shaft there is a decided improvement. The lode itself appears to be more concentrated, and the ground favourable." He strongly recommends that the shaft should be sunk 50 fms., "as there cannot be two opinions but that present appearances indicate improvement in those directions," and he considers that "but a slight improvement is required in the lode to make the Barrier an exceedingly valuable mining property." He also believes that "there are thousands of tons of ore that may be returned profitably."

Capt. Trewren states, "It is seldom that in Cornwall better indications (at the depth of the adit) for a profitable mine are found; the depth of the adit is about 30 fms., and I believe that 20 fms. of that would come away on tribute. * * * I feel confident that the large quantity of ore already obtained from the mine cannot be there alone, and from the ground now opened I believe a great quantity of ore can still be raised."

The whole of the papers and reports respecting the mine having been laid before Capt. James Richards (the managing agent of the celebrated Devon Great Consols Mines), his report on the same can also be seen at the office. He remarks, "As far as I can judge from the different reports, and especially from the one published in the *Mining Journal* of 20th July (Capt. Rowe's report), I think this mine holds out more than the ordinary chances of success."

The mine being close to the sea, the ore is at once put from the dressing-floors into barges, which take it alongside the ships, consequently there is no land carriage, generally a very heavy item in the costs of foreign and colonial mines; while the freight home (in the wool ships) has varied from only 2s. 6d. to 12s. 6d. per ton, making the mine in these respects like one at home, with the additional great advantage that the quality of the ore is more than double the average of that of the copper ores of this country.

A provisional agreement has been made with the Great Barrier Company for transferring the mine and plant (including two steam-engines), with 300 acres of land, to this company, on the following very moderate terms:—£15,000 (5000 paid-up shares and £5000 in money), and a royalty of 1-20th on the ores sold. The Great Barrier Company intend to retain these paid-up shares as an investment.

All preliminary, legal, and other expenses, up to and including registration, promotion of the company, and brokers' commission, have been defined and agreed for at 5 per cent. upon the nominal capital of the company.

As soon as the necessary capital is subscribed for the requisite machinery will be ordered and sent out. It is also proposed to appoint Capt. Holman the managing agent of the operations, which he has offered to undertake at a reasonable salary; and as he is already in the colony the expense of sending out an agent will be saved, and no time be lost in carrying out the objects of the company.

Looking, therefore, at the large quantity of productive ground already laid open (which by Captain Holman's estimate of the quantity of ore and its produce may be valued at about £50,000), the quality of the ore, the advantages as to carriage and freight, and the short time required to put the mine in full work on a greatly extended scale, it is evident that such an opportunity seldom presents itself for obtaining early and highly remunerative results.

The company is divided into 25,000 shares of £2 each, and being established under the Limited Liability Act, no shareholder will be liable for more than the amount he subscribes for. A deposit of 5s. per share is to be paid into the bankers, who will give a receipt for the same, and the application for shares can then be sent to the office or to the brokers. A further sum of 5s. per share will have to be paid on allotment, but in case no shares are allotted, and unless at least one-half of the shares are subscribed for, the deposit will be returned in full. If only part of the shares applied for are allotted, then the balance of the deposit will be applied towards the second 5s. on the number allotted. No further call will be made for at least twelve months, and it is believed that £10,000 will be ample to fully develope the mine, leaving a large capital in reserve to meet any contingencies, and if found desirable to smelt the ores, or reduce them to regulus, in the colony.

A large number of the shares being already taken, applications (in the form annexed to the prospectus) may be made for the remainder, which will be allotted in the order they are applied for.

The directors will be prepared to receive applications from parties desirous of paying up their calls in full, on which interest will be allowed at the rate of 5 per cent. per annum.

Prospectuses, with forms of application for shares, can be obtained from the office, or from the brokers.

Among other testimonials in favour of Capt. Holman, the following have been received from Mr. Humphry Willyams, banker, Truro, and a partner in the well-known copper smelting firm of Messrs. Sims, Willyams, & Co.:—

Carnanton, Oct. 5, 1861.—It gives me great pleasure to reply so satisfactorily to your enquiry about Capt. Holman. I have known him for a great many years, and have employed him on many occasions and in all parts of the world. He is an extremely intelligent, judicious, and trustworthy man, sober and honest to the fullest extent, and I consider him to be fully competent to be entrusted with the management of any mining undertaking. H. WILLYAMS.

Miners' Bank, Truro, Oct. 23, 1861.—I sincerely wish for your success in your proposed undertaking, and I take the present opportunity of confirming my previously expressed opinion of the judgment and ability of Capt. Holman, of which I have had many years' experience. H. WILLYAMS.

Truro, Nov. 6, 1861.—You are at perfect liberty to publish my letter respecting Capt. Holman. My opinion of him exceeds what I have expressed on paper.
H. WILLYAMS.

THE CENTRAL SNAILBEACH MINING COMPANY

(LIMITED).

Duly Incorporated.

apital £10,000, in 10,000 shares of £1 each. Deposit on application, 2s. 6d. per share. 5s. per share payable on allotment.

No call to exceed 5s. per share, and three calender months at least must elapse between each.

DIRECTORS.

JOB TAYLOR, Dudley.
EDWARD HENRY LOWE, Shrewsbury.
GEORGE JOSEPH ENGLAND, Dudley.
JOHN JOB, Snailbeach.

CONSULTING ENGINEERS—Messrs. Phillips and Darlington, Moorgate-street Chambers, Moorgate-street, London.
BANKERS—Messrs. Rocke and Co., Shrewsbury.
AUDITORS—John Thomas Bell, Shrewsbury; John Treasure, Newport, Shropshire.
REGISTERED OFFICE,—SWAN HILL, SHREWSBURY.

ABRIDGED PROSPECTUS.

The company's extensive and highly-mineralised sett adjoins the western boundary of the permanently lucrative Snailbeach Lead Mine, Shropshire, with the New Venture Mine on the south.

A shaft is being sunk for intersecting Snailbeach main vein and Davies's vein at their junction.

Upwards of 3100 shares of the company's capital are taken, and it is proposed to issue 3000 more.

Applications for shares may be made to the secretary, who, as well as Messrs. PHILLIPS and DARLINGTON, will forward prospectuses and plans, and also afford any further information. Early applications are requested.

SAML. HARLEY KOUGH, Solicitor and Secretary,
April, 1862. Shrewsbury and Church Stretton.

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published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

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By a COLLIERY MANAGER.

Free and unprejudiced minds will neither antiquate truth for the oldness of the notion nor slight her for looking young, or bearing the face of novelty.—HENRY MORE, F.R.S.

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on the scale of 1 inch to the mile, beautifully coloured, mounted on roller, varnished, £4 10s.; or on spring roller, £9 9s. North Wales, similarly coloured, roller, £4 4s.; spring roller, £3 15s. Also, the vertical and horizontal sections, mounted on linen, in half morocco cases, for South Wales, £10 10s.; North Wales, £8 8s. Every good geological map published. Plans, sections, and maps lithographed, traced, coloured, or mounted, with promptitude. Illustrated catalogues of the whole of the Ordnance and Geological Survey, and of other valuable maps, atlases, and guides, will be sent per return of post (on receipt of one stamp) by LETTS, SON, and Co., 8, Royal Exchange, London, E.C., map sellers and mounters, lithographers, printers, and draughtsmen, and agents to the Board of Ordnance and the Geological Society.

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ASSAY OFFICE AND LABORATORIES,

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The PARTNERSHIP between MITCHELL AND RICKARD having EXPIRED, this BUSINESS will in future be CONDUCTED, as hitherto, under the PERSONAL SUPERINTENDENCE of W. T. RICKARD, F.C.S. (Assayer of the Precious Metals, &c., by special authority of the Chilian Government), who will pay all outstanding debts against the late firm.

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FINANCIAL AND ENGINEERING CONTRACTS.

Notices to Correspondents.

*** Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly *filed* on receipt: it then forms an accumulating useful work of reference.

THE MWYNDY IRON ORE COMPANY.—I regret not being able earlier to reply to "H. B.," in the Journal of March 22. I was desirous of giving the ore a fair test, which I have now done. I have had three lots tried, but not a particle of silver was there found. I find "Constant Reader" (in the Journal of April 19) enquiring about this mine. I do not know whether he considers Mr. Maxwell's reply, in the Journal of April 26, a sufficient answer to his enquiry. I will ask Mr. Maxwell why the report of silver having been found was not at once contradicted, when he and the directors were fully aware that no such thing was found. I cannot see how it would be "premature on the part of the board" to contradict this. The secretary also states that silver was found in one instance: will he be good enough to furnish, through the next Journal, your anxious readers and shareholders with a copy of the analysis, and the name of the assayer? Will the secretary also say why a fortnightly or monthly report is not given of the mine, signed by the captain, the same as the Cornish mines are reported? The shareholders would then know exactly how the mine is progressing. As it is, they know nothing. Several friends of mine were induced to take shares on the faith of the company's prospectus, and it is nothing but right that we should know all about it. A report, as above, would have the desired effect.—J. W. M.

SIR,—Can any of your readers inform me whether it is usual for a manager entrusted with and paid for preparing for sale the materials of a mine, to convey to himself and his friends several cart-loads of timber, and charge the shareholders with the expenses of doing so? If the timber is of little value, would it not be wrong to waste the shareholders' money to bring it to surface? If such things are done in the daytime, could not plunder to a greater extent be perpetuated in the night season?—J. T. KEVERN: *Pensance, May* 14.

MINE LICENSES.—I thank you for publishing my enquiry in the Journal of May 3, and shall be glad if you will now insert the following—Do the English miners pay for any license for mining for copper, tin, lead, or zinc? In Scotland there is an Act whereby the Government can exact 10 per cent. If you in England have not this duty, it may truly have been said—this is the reason Scotch ores are not worked. I am resolved to get at the bottom of this matter, and then set our Scotch M.P.'s to look to their duty. I really may state that till I moved in the matter there was not a Scotch copper mine of note going; Lord Breadalbane was simply working for his pleasure. Is there a Mining Government Office in England where taxes are levied on ores? Firstly, What are these taxes? Secondly, Are these taxes on ores payable in England, Scotland, and Ireland? Or, thirdly, Are the offices simply for the payment of taxes in England? As to licenses, I am told that we in Scotland require a license, and that you in England have paid these licenses for years. I conceive it a curious piece of Government neglect not to put all Great Britain under one Act. I only ask that the same privileges should be extended to Scotland as are enjoyed in other parts of the kingdom.—W.

GURLYN MINE.—If your correspondent, "X. Y. Z.", really be in earnest in the enquiry he makes respecting the "wonderful" Gurlyn Mine, I think I can easily explain to his satisfaction why there are no shares to be bought in the London market. Although quoted weekly in your List, and now standing nominally at 15s. to 17s. 6d., are rarely if ever dealt in; simply from the reason that they are principally held by country shareholders, who went into the mine as investors, not a speculators, and are, therefore, free from that jobbing which characterises the shares of other and more generally favourite mines with the brokers. Since the mine was first brought out, two or three years ago, there have, perhaps, been fewer changes than in any other mine of the like number of shares; and, as evidence of the estimation in which the mine is held in Cornwall, I may mention that when any shares have been offered for sale, they have been bought up by holders principally residing in the district of the mine. The last report issued to the shareholders, which I have just received, proves this; for out of about 200 shares that have changed hands, nearly all the purchasers reside in Cornwall, and the most of them are persons who have increased their holding. The prospects of the mine are now so cheering that there is little doubt that, if the brokers were to turn their attention to it, there would not only be very extensive transactions in the shares, but the results would be satisfactory to the speculators. If "X. Y. Z.," however, really means to purchase, he must prepare his mind for a higher price than that quoted in the Journal of Saturday last. One word more. I do not understand why "X. Y. Z." should designate Gurlyn a "wonderful" mine: it is an honest, well-conducted undertaking, and the intention is to make it a success: there is, however, nothing "wonderful" in it. Most assuredly it promises well, and the shareholders have now every reason to congratulate themselves on their prospects.—A SHAREHOLDER.—P.S. Since the above was written, I have been informed the value of Gurlyn shares has risen considerably, and buyers are offering freely, without meeting with sellers.

MINE SURVEYING—"J. de L." (Swansea).—The proposition to make underground surveys without the use of the magnetic needle is not new, and there is no doubt that the circumferentor will at no distant date entirely supersede the common dial. Surveying with the circumferentor is thus described by Budge in his "Miner's Guide:"—The method of surveying on this principle differs from the magnetic method chiefly in one particular—namely, in every fresh draft the position of the bearing must be ascertained by the back observation, in the direction of the sights, and the angle made at the old station must be obtained and preserved at the new station, and this is evident because we have no magnet for our guide. For example: Suppose we are surveying over a railway in a level, and the last observation was 259°; after measuring the length the instrument is removed and carried forward to the place of the light where the angle was taken, and a mark and light left at the old station. Then, after the instrument has been adjusted in its true place, the next act of the surveyor is to place the centre of the vernier on 259°, as it stood at the old station; and if the instrument does not move by rackwork he must keep all firm with his hands, and turn the head towards the last station, until the candle is seen through the sights. He then removes behind the instrument, and moves the sights in the direction for the next draft, where the assistant is holding a light for the purpose (the graduation being fixed), and this new draft gives (say) 270¼°, showing a difference between the two drafts of 11¼°. Although this process is somewhat tedious in description, it is simple in practice, and the history of one draft is as well as a hundred; and we may observe that, with proper care and judgment, this is the most perfect method of surveying, because there is no risk of attraction; and as the circle is much larger than the inside plate, and the divisions more distinct, together with the vernier scale being applied, the angle may be read off to one or two minutes—a nicety which cannot be attained by the common way. It is hardly necessary to state that in order to obtain the [illegible] must be at least one draft in the traverse where the needle must be brought [illegible] and this draft will determine the polarity or direction of the whole. If "J. de L." discovered a means of dispensing with the compass altogether he is entitled to [illegible] novelty, and we shall be glad to publish a description of the apparatus he employs.

Mr. Evan Hopkins is expected to be in the neighbourhood of Dolgelly and [illegible] about the end of next week.

SIR,—Would one of your correspondents, who is proprietor on Crown lands either [illegible] wall or elsewhere, inform me what charge the Crown makes on the yeoth of ore [illegible] lend, or tin ores? If the landlord received 200*l.* from his tenant, what amount [illegible] the Crown demand from the landlord?—X. Z.

PORT PHILLIP GOLD COMPANY.—The Clunes Mine report reached us too late for [illegible] sent Journal, but it shall appear next week.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, MAY 17, 1862.

At a moment like the present, when several projects for applying [illegible] capital to the development of the auriferous deposits both of [illegible] our North American provinces are on the eve of being introduced [illegible] public, an almost inestimable value attaches to such papers as that [illegible] "Gold Mining and the Gold Discoveries made since 1851," read [illegible] the Society of Arts, on Wednesday evening, by Mr. JOHN ARTHUR PHILLIPS, and which we publish *in extenso* in a Supplement to this [illegible] Journal. Of the author's ability to deal with the question we need [illegible] nothing, since he has already acquired a high reputation as a chemist [illegible] metallurgist from the publication of his very excellent "Manual of Metallurgy," a work which has been declared by so eminent an authority as [illegible] PERCY, the Professor of Metallurgy at the Government School of Mines, [illegible] to be the only reliable work in the English language, and one which [illegible] only surpassed in utility by the costly volumes now issuing by the Professor himself. Of the manner in which Mr. PHILLIPS performed the task he had undertaken, it will suffice to allude to the remark of the President, Mr. THOMAS SOPWITH—"I have seldom listened to a paper in which a subject has been more clearly brought forward." We have thus pointedly alluded to the position of Mr. PHILLIPS, because it must be acknowledged that, however startling a statement may be, it becomes unimportant unless confidence can be placed in the party by whom it is made.

In several respects the paper is worthy of the most serious consideration, for if Mr. PHILLIPS's views be borne out there can be no doubt that gold mining will assume a very different aspect. It has hitherto been stated that "gold is found only in the metallic state;" but Mr. PHILLIPS, although admitting that it almost always, if not always, does so occur, tells us that from the results of numerous experiments which he has made he is inclined to the belief that gold does sometimes occur in small quantities, in the form of sulphides, but that oxide of gold, for the extraction and utilization of which sundry much-vaunted processes have been devised, does not exist in any of the known auriferous ores. We quite agree with Mr. PHILLIPS that it seems doubtful whether, in every instance, all the gold in auriferous sulphides exists in the form of minute metallic particles, and can well understand the facility with which the sesquisulphide especially of gold may be formed in Nature. Mr. PHILLIPS's view would likewise appear to be confirmed by the fact that all gold metallurgists well know that when gold is associated with metallic sulphides a different treatment is absolutely necessary to extract the gold—a circumstance which would scarcely be expected to exist were all the gold in the metallic state. As the extraction of the gold from the sulphides would present some little difficulty in amalgamation, he suggests that the pyrites, &c., in the tailings should be separated, and subsequently subjected to metallurgic treatment by fusion for some lead product.

With regard to the gold formations of North Wales, Mr. HARKNESS' argument certainly appears unanswerable, that if in Australia, where labour, fuel, and machinery is costly, gold ores containing but 10 dwts. 8 grs. can be profitably treated at 8s. 4d. per ton, there is good reason to suppose that at the Cwmheisian, where the ore contains 15 dwts., and labour, fuel, and machinery are comparatively cheap, at least an equal amount of profit would be obtained. We may here remark that the prospect of gold mining in Merionethshire being found remunerative is much increased by the [illegible] very made on Saturday last at the Clogau Gold Mine. In driving a lower cross-cut west the bunch of visible gold worked in the 5 fm. [illegible] was cut very rich, thus clearly proving that the assertions of a [illegible] authority that the Welsh deposits are merely surface deposits are not [illegible] out, the lode at the deepest point in the mine, 46 yards, being as rich [illegible] at surface.

As to the extent to which gold mining advances the interests of a [illegible] trict we think that Mr. SOPWITH's remarks upon the export of that [illegible] from the colony of Victoria, and the steady increase which has been [illegible] on, in spite of the predictions that the yield could not be continuous, [illegible] very appropriate. In 1851 the export of gold was but 145,146 ozs., [illegible] value of 580,587*l.*, whilst in 1860 it had increased to 2,156,660 ozs., [illegible] 8,626,642*l.*, the aggregate export in the ten last years being [illegible] 24,000,000 ozs., worth 95,671,918*l.*; this was according to the Custom returns, but if the private shipments be added it raises the total value to the enormous sum of 103,941,976*l.*, which is equal to one-third of the total value of all the metalliferous products of the United Kingdom during the same period.

The whole of the discussion upon Mr. PHILLIPS's paper was of an exceedingly instructive and useful character; and as no attempt was made to disprove the existence of a large and valuable auriferous [illegible] even by those in the room who had previously asserted that the [illegible] rative deposit extended over but a few fathoms, and to no considerable depth, we may hope that the richness of the district has been now [illegible] proved that the operations of the several undertakings now being [illegible] will be attended with success. It may certainly be supposed that [illegible] cient experience has now been obtained with reference to the economical [illegible] traction of gold to enable almost any auriferous deposit yielding more than ½ oz. of gold to the ton to be worked to a profit; and we may, [illegible] conclude that whether the field for enterprise be Wales, Nova Scotia, British Columbia, capital, energy, and careful management cannot fail to meet its reward.

A few weeks ago we had occasion to bring before the attention of our readers the cases of the TRETOIL and WHEAL ANNE MINING COMPANY, in which the Master of the Rolls decreed that those companies should be wound-up in his Court, and not in the Stannaries Court. We then observed that, although the proceeding would have the effect of depriving the latter Court of a great deal of its business, and consign mine contributories to the costly horrors of Chancery, yet that such Court had rightly assumed the jurisdiction it had exercised, and that the jurisdiction of the Stannaries had been overwhelmed and absorbed in the vortex of Chancery.

Since the above cases, the Court of Chancery has proceeded to wind-up several other Cornish mining companies, and, no doubt, would have continued to do so had it not received a salutary check in the late case of the NORTH WHEAL EXMOUTH MINING COMPANY, which will render it more cautious for the future. In that case a petition was presented to set aside an order which had been made by the Rolls Court in December last, on the petition of a shareholder, for winding-up the mine, which is situate in the county of Devon. The present petitioners, Messrs. SMITH and [illegible] MAN, prayed that the winding-up order might be set aside on the ground that the mine, being within the Stannaries jurisdiction, the statute [illegible] 21 VICT., c. 78, sect. 12, required that leave should be previously obtained from the Court of Chancery to present the winding-up petition, whereas it did not appear from the petition on which the order was granted that such leave had been obtained. The petitioners stated that they were desirous of preventing a collision of jurisdiction between the Chancery and Stannaries Courts, a result which would occur in consequence of the winding-up order having been granted without one of the preliminaries required by the before-mentioned Act. His Honour, in giving judgment, said it was important that the statute in question should be complied with, for otherwise the Court of Stannaries had jurisdiction, and it might happen that his Court and the Court of Chancery would be found carrying on conflicting winding-up processes with regard to this company. The order of December would, therefore, be discharged, and a new one granted on the present petition, but the costs of the original petition would be paid out of the estate. Thus it appears that the Court of Chancery in setting aside the right inflicted the costs of the abortive petition upon the unfortunate

...tories, who have not only to pay the costs of the two petitions, but also deprived of a convenient, cheap, and expeditious winding-up by the Stannaries Court. The grievance is irremediable, and arises from the ...that the Court of Chancery is the sole arbiter of the necessity or non-...ssity of its own interference, and as it never declines jurisdiction, it ...ows that the Stannaries Court, so far as windings-up are concerned, ...y be declared to be *functus officio*. To contributories this is a very ...ous matter indeed, it being a well-recognised fact that, beside the pro-...bial delay of Chancery, the costs in such Court amounts to hundreds, ...even thousands, of pounds, whilst the expenses of a similar proceeding ...the Stannaries Court would not amount to a tithe part thereof.

THE LONDON COAL TRADE.

In February and March last, when the London Coal Market was in a ...e miserable condition than it had been for very many years before, we ...ised the shippers of coal to London to effect, amongst other reforms, an ...ngement by which their exportations might never exceed the legiti-...e demand for the article, and not to persist in the mad policy of ...ptying their pockets into the purses of the London factors and coal mer-...nts. The Northern Coal Trade Association, therefore, issued a cir-...r strongly recommending the owners of household collieries not to work ...e than eight days per fortnight until the first of May, and urging all ...orters of coal to the Thames to be as sparing in their shipments as pos-...e. This, though only a small instalment of the plan necessary to re-...e the trade to a healthy condition, has had a beneficial effect, for con-...ments to the Pool having been more moderate, the general tone of ...metropolitan market, though still unsatisfactory, has, as our readers are ...re, undergone improvement. The Association has now sent out an-...r circular, pressing upon the trade the necessity of adhering to the same ...rse of action for a couple of months longer. The following is a copy ...he document:—

"Referring to the circular to the trade which was issued by the general committee, ...r date March 18, calling upon the shippers of coals, and especially those shipping to London market, to curtail their shipments until the 1st of May, your attention is respectfully drawn to the state of that market. It is clear that, had that advice not responded to by the coalowners of this district generally, and had not the same views acted upon to a very great extent by the inland coalowners, the present state of the ...opolitan market would have at this moment been much worse even than it now is. ...committee accordingly deem it their duty further to urge upon the coalowners a ...lute persistance in the same course until the close of the month of June, when it ...s to be probable that circumstances may render its continuance less necessary.—...ille Hall, May 8, 1862."

After the end of June, we suppose, the trade will revert to the system ...competition which has brought it so low, and glut the market as before, ...dering fresh circulars and more pressing advice from the committee of ...coal trade necessary. To a common observer of events this persistence ...suicidal policy by a body of enlightened commercial men seems sur-...ing, but it is not more strange than their tolerance of the factorage sys-...m, and their apathy with respect to railway charges and taxes that are ...ied upon the commodity they vend for the benefit of the metropolis. ...e coal trade ought to be a most powerful body, for it comprises men of ...at wealth and vast influence, and is well represented in Parliament; ...it lacks unity and earnestness of purpose in promoting its interest, and ...ce its achievements always fall short of its power and capabilities. ...e regret the necessity which compels us to write so pointedly, but it is ...evous to see a most important branch of commerce thrown into confu-...n, and apparently tending to the ruin of some of its members, for want ...that union, energy, and public spirit which distinguish most other de-...rtments of the national industry.

WILL RED-HOT IRON IGNITE CARBURETTED HYDROGEN GAS?

Until within the last few years it was generally understood amongst scien-...c men, connected with mining operations, that inflammable gases would ...ignite when in contact with heated iron. Acting under this impression, ...forefathers proposed what was called the hot cylinder process of mine ...tilation, which consisted in placing a cast-iron cylinder, open at both ...s, upon a furnace, when the cylinder, being enveloped in flame, rare-...the air as it passed through it. The late eminent John Buddle, in his ...-known letter to the Sunderland Society for Preventing Accidents in ...l Mines (*tempus* 1814), alludes to this system, and asserts most posi-...ly that "inflammable gases never ignite at hot iron." In the state of ...ing knowledge then existent, Mr. Buddle was justified in making this ...rtion, for nothing was known to the contrary. But of late years, as ...nce has progressed, and the nature and properties of gases have be-...e known, mining engineers have obtained more accurate information ...matters that were formerly obscure, and have made discoveries that were ...er suspected by their predecessors. We know now that Mr. Buddle's ...tum was incorrect. Sulphuretted hydrogen gas, although it does not sup-...t combustion, may be inflamed by charcoal or iron, even at a low red-...t; and experiments tend to the conclusion that carburetted hydrogen, ...fire-damp of mines, also can be ignited, though not so easily, by iron ...a state of heat. We say "tend to the conclusion," because it is not yet ...itted that the ignition of fire-damp by hot iron is an undeniable fact; ...because we wish to raise the question, and press it to a solution. Our ...rmation on the subject is very incomplete, and we desire to see it full ...decisive, conceiving that there are few matters connected with mining ...rations, especially in the coal-yielding districts, of greater importance. ...e little we know on the subject is contained in the following extract ...a short paper by Mr. G. C. Greenwell, in the Transactions of the ...rth of England Institute of Mining Engineers:—

"...n Friday, May 27 [1853], I, in company with Mr. Simpson, made some experi-...ts at Towneley Colliery, in order to ascertain the effect of placing red-hot iron in con-...with light carburetted hydrogen gas. The gas, which may be termed "washed ..." as it passes through a drowned drift in the Three-Quarter seam of this colliery, is ...eyed by means of a pipe in the shaft to the surface; it then passes through ...tha into a gasometer, and thence to various burners in the shops and elsewhere. ...re is also a cock between the top of the shaft and the naphtha vessel, whence, when ...d, the gas issues in its natural form. The first experiment consisted in placing a ..., about 2 inches in diameter, heated to a cherry-red, in contact with the naphthalised ...in the smith's shop. The gas was immediately inflamed; in a short time, however, ...iron, still at a good red-heat, ceased to possess the power of exploding the gas. Pre-...y the same effects were produced when the iron was applied to the cock between ...pit and the naphtha vessel. The next experiment consisted in applying a Davy gauze, ...rly heated, to the issuing gas. An immediate explosion inside of the gauze was ...result, and this was repeated several times; the flame, however, did not pass through ...ignite the external gas. From this it appears that the mass of hot iron applied to ...gas was the occasion of its explosion; acting, in the first instance, by heating the ...and in the next by igniting it when so heated. For when iron, in the condition of ...gauze, although equally hot, was applied to the current of gas, instead of the iron ...the first place heating the gas to such an extent, the gas operated in cooling the iron ...ually; after, however, the gas had passed through the gauze into its interior, it acquired a sufficient degree of warmth to enable the opposite side of the cylinder, red-hot, to explode it. I intend making some further experiments on this subject, ...n, when completed, I shall take an opportunity of laying before the Institute. Note—...the gas formed in wet pits, or issuing with water, may be termed in an equal de-...with the above washed gas. If the above theory be correct, it follows that when ...rapidity of the current of gas is such that the whole of the quantity passing into the ...e (supposing it to be red-hot) cannot be consumed within the gauze, the surplus, ...heated state, must pass through, and be very liable to explode.

...he PRESIDENT: There was a question raised at the last meeting at the Institute, as ...whether red-hot iron would explode fire-damp, and this experiment shows that it did ...ode that gas. In the first case, however, the gas passing through naphtha would re-...some portion of the spirit, and be thereby rendered more inflammable than it other-...would be; but in the second case the gas was applied before it passed through the ...tha, so that it would be similar to gas issuing from a blower. Whether any increased ...mability was produced by the gas passing through the water, was an important ...ion. But there was another most important point in these experiments, which ...this—the gas, they would observe, did not fire at the first wires, or in passing into ...lamp; the wires, it appeared, had the effect of heating the gas as it passed through, ...then, when it came to the other side of the lamp, and approached the red-hot wires, ...ploded.—Mr. ELLIOTT: The gas becomes heated in passing through the first wires, ...therefore, more inflammable.

...r. GREENWELL.—I may explain that these experiments with the gauze were made ...gas after it had passed through naphtha; but in the experiments I made with iron, ...was no difference between passing the gas through naphtha and not doing so.

...r. ELLIOTT.—Was there any pressure?—Mr. GREENWELL: There was the ordinary ...sure, the same as you see in a burner.

...he PRESIDENT.—Would it not be well to have the gas analysed?—I have sent some ...gas from Killingworth to Mr. Richardson for that purpose, so that the constituent ...may be ascertained.

...r. ELLIOTT.—I suppose the explosion would not be instantaneous—there would be ...rt interval after the gas was passed through the wires?—Mr. GREENWELL: It was ...y short time, only about a second.

...r. DUNN.—Was there the same degree of heat in the experiments?—Mr. GREEN-...L: Apparently so.

...he PRESIDENT.—It is quite clear that these experiments ought to be carried further ...they have been, they are very interesting."

We agree with Mr. Wood that these experiment ought to have been ...ried further; but we do not know that they have ever been resumed, or, ...they have we can find no record of the result. Three days after the ex-...ments were made, a select committee of the House of Commons was ...ointed to investigate the causes of accidents in coal mines. But although that committee, and a committee which sat in the following year, heard a good deal of evidence relative to the effect produced by rapidly passing the Davy lamp through currents of inflammable air, &c., no allusion to Mr. Greenwell's discovery seems to have been made by any of the members of the Northern Institute who were examined. Our present state of knowledge on the subject is, therefore, imperfect and unsatisfactory to a degree which, when the importance of the matter is considered, must be accounted surprising. Who can tell how many accidents have risen through a misplaced confidence in the non-explosive properties of a heated safety-lamp, and how many disasters might have been prevented if the true nature of the effect produced upon fire-damp by contact with hot iron had been more accurately known? Neither pains nor expense were spared in investigating the relative merits of the steam-jet and furnace ventilation; we should be glad to hear that similarly careful experiments had been commenced with a view to obtain a decisive answer to the question which heads this article. Our space is limited, for we represent many separate branches of mining industry, but a reasonable portion of it will always be at the service of practical men who will undertake the investigation, and tell us whether or not—and, if the former, under what circumstances—red-hot iron will ignite carburetted hydrogen gas.

AMERICAN OR ROCK OIL, AND PARAFFIN OIL.

A comparison was drawn in last week's Journal between the ordinary rock oils of America and Young's paraffin oil, in order to show that although accidents have occasionally occurred from the incautious use of unpurified mineral oils, they are absolutely safe and inexplosive when manufactured with ordinary care. Young's paraffin oil was taken as a type of safe-burning oils, and we stated that the temperature at which Young's oil would ignite without a wick, or, in other words, its explosive point, was from 140° to 150° Fahr., whilst 130° was fixed as the standard of absolute safety. We stated that of 32 samples of paraffin and similar oils purchased retail in Manchester, and analysed for the Manchester and Salford Sanitary Association by Mr. Charles O'Neill, the well-known analytical chemist, five only were found to be dangerous, and four others slightly unsafe, though not dangerous, because exploding at a temperature which may, under extraordinary circumstances, exist in domestic rooms. The remaining 23 samples varied between the standard of safety and that of Young's best oil, all of them being, in the opinion of Mr. O'Neill, "beyond the limit of possible danger." In no single instance was Young's oil, or oil possessing similar properties, found to be unsafe, a circumstance which may be attributed to the difference between the lowest temperature at which such oil will explode and the standard of safety which is at least 10° Fahr. But although chemists well know that this 10° is ample to ensure safety, it must be acknowledged that the public are but too apt to regard 10° Fahr. as so slight a variation in temperature as to be insufficient to give them confidence; the consequence being that they abandon the use of the oil altogether.

Now nothing can be more easy than to determine the relative explosibility of burning fluids, it being simply necessary to consider that the danger is caused by the fluid becoming converted into gas, and the ignition of a mixture of this gas with the surrounding air. The danger, of course, *in*creases according as the temperature at which the fluid is converted into gas *de*creases, and hence it is that as in ordinary cases the temperature of 130° Fahr. cannot be obtained in a lamp, and as Young's oil requires a temperature of 140° Fahr. to convert it into gas, such oil may be employed with safety. But, as we have remarked, 10° Fahr. is too often regarded as too small a margin to depend upon, and to remove this obstacle to the general use of mineral oils, the ASPHALTUM COMPANY (Limited) have just introduced into the market an oil that will not ignite under from 190° to 200° Fahr., giving a margin of safety equal to *five* times that claimed for Young's oil. Indeed, to such an extraordinary degree of safety have the oils of the Asphaltum Company been brought that we have seen them burned in an ordinary moderator lamp. We do not intend to say that it could be so burned by the general consumer, as after some thirty minutes burning the flame begins to creep down the outside of the tube, and the experiment then becomes dangerous, but we understand that the company do not despair of rendering it as inexplosive as colza oil. The effect of the success already attained is, that whilst the Paraffin Light Company can guarantee the safety of their oils up to 130° Fahr., the Asphaltum Company can with equal certainty guarantee theirs at all temperatures under 180°. This extreme safety, moreover, is secured without lessening the illuminating power of the oil, and results from extracting the dangerous ingredients in a valuable marketable form, and at a cost that well repays all outlay incurred in the extraction.

ALBERT IRONWORKS (near Whitby, in the Cleveland District).—During the past week there has been great rejoicing in the villages adjacent to these extensive works. On Tuesday last blasting operations were commenced, and on Wednesday and Thursday we observed on the ground a number of the directors, as well as several influential gentlemen in the neighbourhood; on the latter day several of the proprietors visited the works, and the "tapping" was performed by Mr. C. H. Turner, the Chairman of the company, when a splendid run of metal was obtained. The directors were gratified to find that the quantity of metal produced was considerably beyond what the stone was expected to yield; the quality also far exceeded their expectations. These works have been erected at considerable outlay, and the proprietors have been fortunate enough to begin at a time when the iron trade is recovering from its late depression. The company purpose erecting large cement works on the premises, as they have an abundant supply of stone. Altogether, the works are in a fair way of repaying the spirited shareholders a large dividend for their outlay.

MANUFACTURE OF STEEL.—So many propositions for improving the quality of steel have been proposed, so many impracticable schemes have been brought forward, and so many old processes have been re-invented, that we have almost learned to wonder at nothing; otherwise we should have been inclined to refer to the invention which has been provisionally specified by M. Rousselot, of Paris, as worthy of particular attention. We have had to record the peculiar notions of an auriferous and argentiferous iron patentee, of pneumatic iron makers, and of titanic steel producers, yet few of them have done much good either for themselves or in the cause of science—Mr. Longmaid is now unheard of; Mr. Bessemer, we believe, has almost abandoned his original invention for using good iron as fuel; and Mr. Mushet has discovered that he can make a quality of steel which gives every satisfaction to the miner, who is very choice in his selection, without bringing ore 12,000 miles to make it of, and with but a very slight modification of the old and well-tried process. The invention of M. Rousselot is described as calculated not only to improve the quality of cast-steel, but also to harden other metals. According to his process, the iron to be converted into steel is immersed in a solution composed of 30 parts of boric acid, with 1000 parts of water, at a temperature of 10° C., or 50° Fahr., the iron being allowed to remain a sufficient time for the liquid to completely penetrate the oxide of iron; it is then removed wet from the bath, and at once placed in a crucible or furnace for melting, being covered, as usual, with slack. He employs the furnaces, forges, and crucibles of the usual kind; the amount of heat to which the iron is subjected must be beyond that of the melting point of iron, but below that of steel. The steel thus obtained neither requires re-baking nor refining, and is applicable to a variety of uses; it often does not require tempering to receive an edge, which it retains longer than other steel. The steel can be cast into bars, care being taken to keep it at a dull red heat before red heat, after which it can be worked or refined in the ordinary manner. Instead of the solution he sometimes employs 0,008 parts of borate of soda to 1000 parts of iron in the crucible, covering the mixture with damp coal. The proportions vary according to the quality of the metal, and the chemical equivalents may be substituted for the borate of soda.

A NEW DRAWING-ROOM FUEL.—A description of fuel which will, no doubt find favour in the drawing-room, and which may also admit of the sale, at a highly remunerative price, of coal of a size which at present renders it almost unmarketable, has been patented by Mr. E. Breffit, of King William-street. The inventor proposes to make small wooden boxes about the size of ordinary building bricks, and to fill them with coal, the advantage claimed being that the fire could be kept supplied with fuel with greater comfort than at present, the boxes being readily taken up without soiling the fingers. Mr. Breffit proposes that the blocks should be piled beneath the drawing-room table, or in any other convenient position, and it will be apparent that with very slight modification the present unsightly scuttle could be superseded by really ornamental devices. For example, by covering the boxes with chromo-lithographs or classic engravings they could be tastefully arranged with other ornaments, or as stands for statuettes in various parts of the room until required for use. An ample supply of fuel could thus be kept always at hand.

REPORT ON CORNWALL AND DEVONSHIRE.

[FROM OUR CORRESPONDENT IN TRURO.]

MAY 15.—WHEAL UNION is a mine which seems now to be attracting much attention. It lies just to the west of Redruth—indeed, part of the town is included in the sett—and is bounded on the south by East Carn Brea and Uny, on the south by Great South Tolgus, and on the west by Carn Brea: the lodes traversing the sett are those of the latter mines. A sett so well situated, being on the run of the Carn Brea lodes, and on the parallel of East Carn Brea and Great South Tolgus, is naturally and justly a favourite with many, although not rich at the moment. The mine is principally on the property of Mr. Buller (the other lords are Mr. Robartes and the Messrs. Williams, of Scorrier), and, in common with most of the Buller property, was originally—at least within recent times—worked by Messrs. S. and R. Davey, of Redruth, who are the agents for that property. Their workings were, on the whole, unsuccessful—but then they were not pushed to any very great extent. The present workings commenced about six years ago, and are under the management of Capt. Thos. Glanville, of East Carn Brea. The principal workings at present going on are on three lodes—the Barncoose lode, the middle lode, and the south lode: as the workings on the last named—the south lode—are the oldest it may be well to refer to them first, although they are not at present the most important. The engine-shaft here is down to the 40 below adit, to which level it was put down by Messrs. Davey, not having been sunk at all by the present party: for the last 10 fms., from the 30 to the 40, it is sunk through greenstone, and the lode, which underlies fast north (about 4½ ft. per fm.), has just come into the bottom. From this shaft the south lode has been explored in the 20, 30, and 40 fm. levels by the late and present party. In the 20 the old party cross-cut to lode, and drove 40 fms. east and 25 fms. west; the present party have continued this level 45 fms. more east and 50 fms. more west. In the 30 the old party cross-cut and intersected the lode, but did not drive on it; the present party have driven 70 fms. east and 40 fms. west. In the 40 the old party did not drive, but the present party have gone 70 fms. east and 15 fms. west. Nothing very striking has been opened out in these levels. About 30 fms. east of shaft the lode divides into two parts, of which the north, which is most extended on, may be considered the main one; but the south part, which in the 40 has been driven on for 15 fms., makes a large lode, 18 ft. wide, producing in places good work for tin. The same fork is formed in the lode in all the three levels, in each of which the south part produces work for tin; on this tin ground there are now three pitches working, one in each level. From the 30 fm. level, on this lode, a cross-cut is now being driven south from the south part (just east of the fork), to intersect another more southern lode; it is driven 10 fms., and has about 5 fms. more to go to cut the lode. This latter lode has been worked further west, from a shaft (called the western shaft) 70 fms. west of the engine-shaft, which is sunk perpendicular to adit (by Davey's), and has been continued on the course of the lode by the present party to 6 fathoms below the 20. This more southern lode falls in with the south lode going west; for while at the engine-shaft they are about 15 fms. apart, they are only 7 fms. apart at a cross-cut which has been driven in the 20 fathom level, 10 fathoms west of western shaft, to intersect the south lode, which has been cut here, but not opened on, although it has produced some stones of tin. From this engine-shaft, on the south lode, Messrs. Davey drove cross-cuts north in the 20, 30, and 40 fm. levels, to explore the northern lodes; these cross-cuts, however, were not successful in opening out the lodes, for they happened to be most driven in the great cross-course, which I have already referred to as traversing the Tolguses and Wheal Uny sett (under Redruth Church). This cross-course is a great broken channel of ground, 20 fms. in width, in which the lodes are knocked to pieces. In these cross-cuts north the two already mentioned—the middle lode and Barncoose lode—were cut, but scarcely opened on, by Messrs. Davey. The middle lode was opened on by the old party in the 30 cross-cut north for a couple of fathoms east, but it was found split up. The present party have driven a cross-cut north to it from the south lode in the 40, from a point 50 fms. east of the shaft, so as to be well clear of the cross-course; this cross-cut intersected the lode in 22 fms. driving, which has been opened on 6 fms. west and 65 fms. east. In the present eastern end the lode is split, but it has produced some good work for tin, and, on the whole, is a strong lode, averaging 3 feet wide. As it only underlies 2 feet in a fathom, while the south lode underlies 4½ feet, the latter is fast overtaking it in depth; this however, is not the only point at which this lode has been opened on. It has also been explored from the eastern shaft, which is 105 fms. east of the engine-shaft; this eastern shaft is sunk perpendicular to 14 fms. below surface (the adit is 20 fms. deep), and below on the course of the lode: from it a level has been opened in the 18, which has been driven east about 54 fms. on a large and promising lode for copper. The shaft is now down 37 fms. below adit, and is sinking on a lode producing good work for tin, valued at from 15*l.* to 20*l.* per fm. for the length of the shaft; in another 10 fms. sinking it is expected to hole to the 40, driving east from the cross-cut already referred to: this 40 end is now about 15 fms. ahead of the shaft. The workings on the Barncoose lode are from the new or flat-rod shaft, which has been sunk entirely by the present party; this shaft is about 60 fms. to the north, and the same distance to the west of the engine-shaft: it is sunk perpendicular to the 30 below adit (which comes in 10 or 12 fms. deep), and below that on the course of the lode, underlying north 2 ft. per fm., to the 66. This Barncoose lode—I believe there is no doubt that it is the same as the Barncoose lode in Carn Brea—was cross-cut by Messrs. Davey in the 20 and 30, but from the reasons already stated (the lode being in the great cross-course) it was not "owned," and, consequently, not opened on. The present party has driven the 20 and 30 from the cross-cut back west to the new shaft, a distance, as already stated, of about 60 fms. From the shaft west the 30, which is 2 fms. deeper than the 30 from the cross-cut, has also been extended about 15 fms. The 30 is also extended about the same distance (15 fms.) east from the cross-cut; this level has passed, at places, through a large and promising lode; in the present eastern end it is 3 ft. wide, a branch having gone off north. Between the cross-cut and the new shaft some tin ground was opened on a lode from 2½ to 3 ft. wide, which was stoped above and 4 fms. below the level. In the 30 end west the lode is in branches, but the level has produced some tribute ground; on this lode there are no levels below the 30, plats only having been cut in the 46 and 56, the object being to get down. A plat is now cutting in the 66, in preparation for sinking another lift; this lode has had greenstone on the south side from the 46 to the 56; in the 56 it came to the north side, where it still continues. This greenstone has made the shaft costly and slow to sink, but now it is going to be sunk below the 66 more southward, so as to avoid this rock. In the bottom this lode is in three branches, with lodey stuff between. The pumping-engine on the engine-shaft is a 50-inch working and 10-inch pole in the 30, and a 9-inch bucket; it draws a line of flat-rods to the new or flat-rod shaft, working a 9-inch pole and a 9-inch bucket: the water from this shaft goes back to the engine-shaft in the 30. There is also a 22-inch whim on the mine. The tin is stamped and dressed at some water-stamps to the west of Redruth, belonging to the East Carn Brea adventurers. The drawing is by a skip guided by wire-ropes. These are the main workings on this sett; but besides these there are two other points of some importance at the extreme north and south of the sett. The southern workings are from a shaft (sunk by Messrs. Davey) called the old engine-shaft, which is down 20 fms. perpendicular; this shaft is about 80 fms. south and 90 fms. east of the present engine-shaft; and from its bottom, the 20, a cross-cut is being extended south to cut one of the East Carn Brea north lodes, probably the engine lode, or the lode to the north still uncut. This cross-cut has been extended 20 fms. south of shaft, and has altogether gone through 22 fms. of elvan, without yet being through the course; the back of this elvan course is in East Carn Brea sett.

In the north part of the sett, to the north of the turnpike-road, is Moyle's shaft, down to the 46, on a very promising lode. The water is in this part of the mine at present, but an arrangement between the Union and Great South Tolgus adventurers is in contemplation, by which a cross from the latter mine, which is already extended some distance, may be continued up to unwater these workings.

From these particulars (and to make the position of the mine comprehensible, it is necessary to enter into the particulars) it will be seen that a considerable amount of shallow ground has been explored, as yet without result. It seems, indeed, as if a certain amount of depth were required here; and, consequently, the pushing down of the new flat-rod shaft is an excellent policy. The lode on which this shaft is sinking is undoubtedly the Barncoose lode of Carn Brea, to which it is exactly similar. When we remember what this lode has done in Carn Brea—that it has yielded

all the profits given of late years, and that it was explored for many years before it was found productive—we can best appreciate its importance in Wheal Union. The greatest prospects for copper discoveries would appear to be going east, in the parallel of East Carn Brea. Here we may confidently anticipate that a copper mine will ultimately be opened out. The more one sees of the resources of this great district the more we become convinced of the value of a piece of virgin ground in it, in which adventurers may expect to reap all fruits of all discoveries. The result of the bottom level in East Carn Brea has best shown the unfounded nature of those theories which assumed that because that mine made rich shallow the ore would necessarily fail soon; it was a mere theoretical assumption, and one which the experience of the best Cornish district does not favour. Of course, all bunches of ore end somewhere, but there is no reason why a good lode in this district should not make as deep as any found in others.

Among young mines which are looking up I may refer to one in the Gwinear district—ROSEWARNE CONSOLS,—full particulars of the position and prospects of which will appear in next week's Journal.

REPORT FROM NORTHUMBERLAND AND DURHAM.

MAY 15.—There has been a slight improvement in the Coal Trade this week. At the same time, some collieries are doing very little indeed. The collieries in the Northumberland steam-coal district have been very slack this year, until last week. The Newsham New Pit is now working night and day. The Delaval New Colliery is also doing very well. They are getting on very slowly with the sinking at Bedlington New Pit, on account of the quantity of water to contend with. The Cowpen and North Seaton Companies (amalgamated) intend sinking a pit at Cambois, situated between North Seaton and Cowpen. The Blyth and Tyne Railway Company are about to commence with the new line from Holywell Station to Newcastle. The collieries on the Wear are also in a very depressed condition, most of the Marchioness of Londonderry's pits only working five or six days in the fortnight. The Earl of Durham's collieries are working about nine days in the fortnight. A circular has been issued to the colliery owners of this district, by the secretary to the Coal Trade Association, in reference to the Circular to the trade which was issued by the general committee, under date March 18, calling upon the shippers of coals, and more especially those shipping to the London market to curtail their shipments until May 1; and attention is again respectfully drawn to the state of that market. It is clear that had that advice not been responded to by the coalowners of this district generally, and had not the same views been acted upon to a very great extent by the inland coalowners, the present state of the metropolitan market would at this moment have been much worse even than it now is. The committee accordingly deem it their duty further to urge upon the coalowners a resolute persistance in the same course until the close of the month of June, when it seems to be probable that circumstances may render its continuance less necessary. There was a considerable decrease in the export of coals from the north-eastern ports last month, as compared with April, 1861, at all the ports except Blyth Seaham and Amble, where there was an increase—at Blyth of 1096 tons, at Seaham 715 tons, and at Amble 301 tons.

A general delegate meeting of the miners of Northumberland and Durham was held at Newcastle, on Saturday, for the purpose of hearing the decision of the Coal Trade upon the proposed fund, and to transact other business relative to its establishment. The chair was taken by Mr. John Howie, and there was a large attendance of delegates. Mr. Alexander Blyth read the answer of the Coal Trade, received from Mr. Thomas Doubleday, of which the following is an abstract:—It would be useless to attempt to conceal that the more the subject has been considered the more difficult have the committee found it to see their way to any removal of the obstacles to the formation of a Coal Miners' Fund which appear on all sides. The delegates were candid enough to admit that they, as well as the committee, saw these obstacles; nor did they conceal the doubts which they could not help feeling as to finding any practicable mode of dealing with them. It seems to be the opinion of many, both owners and workmen, that no general fund for the two counties can be successfully established unless the contributions be enforced by law. Yet those likely to be best informed on such a subject assure us that it is extremely doubtful whether the Legislature could be induced to consent to an act of this nature. It involves a principle altogether novel—that of taxing the persons engaged in the coal trade for the purpose of mitigating the natural consequences of a risk in its own nature unavoidable—a principle which is quite at variance with every other upon which the Legislature has hitherto acted. The opposition to such a measure could not but be powerful both within and without the Houses of Parliament. Other trades might be alarmed by the measure, and would commence a defensive and precautionary opposition, upon the very intelligible ground that the Legislature of the present day is clearly based upon the principle of non-interference between the employer and those employed, a principle at variance with any compulsory assessment of the sort proposed. Of the success of a fund depending upon the voluntary payments of a large body of owners and workmen the impediments in the way are very great; unanimity could not prevail. The fund could only be applicable in cases of need to the families of those who contributed, so that in point of fact, in the event of any great calamity, the result might chance to be unsatisfactory in every point of view. The machinery of management being unaided by law, and much impeded by it (the Truck Act appearing to bar any deduction by the owner from wages for this purpose), would be liable to constant evasion, and might occasion much and lamentable misunderstanding between parties. At the same time, it must be also recollected that the effect of such a fund would be to deprive families of the assistance which the existing law secures to them, and even tend to abate the sympathy of the public, whilst, however, the aid usually given by the owners in all cases of accidents would, as the committee believe, be continued as hitherto. To these difficulties a fund, limited rigidly to *fatal* accidents, would be liable, whilst one including, as has been suggested, "permanent disablement," would be exposed to many more. It would, in many cases, be difficult to distinguish disablement in consequence of accident, from disablement owing to natural causes, unconnected with accident. Yet the want of such distinction would probably bring upon the fund numerous cases to which it could hardly be intended to be applicable. The principle of insurance is attended, as the delegates themselves very properly pointed out, by unavoidable and very serious inequalities of result. The sum insured might be required to be divided amongst many, or might become the property of one; and were any plan of this description supported only by a portion of the workmen, and chiefly by those employed underground, and consequently more exposed to risk, the average of casualty falling upon the insurers might be so much increased as to result in heavy loss. Upon this point the committee deemed it their duty to consult some of the established companies which effect insurances in cases of fatal accident. The companies applied to declined to take the risk as described, and the committee were left to calculate it for themselves. The result is that it would required a payment of at least 2*d.* per week per man, assuming that all were insured, to secure 100*l.* upon each in case of fatal accident, together with some aid from the owners of collieries in the shape of a guarantee fund. In any case, however, it appears manifest to the committee that the best chance of success would be to limit its application, at first, to individual collieries. If it were found to work well in this shape, it would be less difficult to amalgamate these collieries within the more extended limits of some general plan upon the same principle. Thus environed by objections, the committee have been unable to frame a plan satisfactory to themselves, or likely to be so to the body of coalowners and workmen. After a lengthened and earnest consideration, the possibility of "a fund in aid," to be raised by the benefactions of owners of collieries alone, has suggested itself to the committee. By "a fund in aid" is meant a fund to be strictly limited to aiding payments from other sources in cases of fatal accidents in collieries subscribing to the fund, whether such payments emanated from some general miners' fund or from some fund raised by the workmen of that particular colliery, or by public subscription. This would need little machinery, the sum might be paid at once, and the payments in aid might be regulated by some rule which would serve as a guide to any board of trustees or sub-committee to whom the management might be confided. The committee regret that they cannot recommend anything more definite, but they must be controlled by the circumstances in which they find themselves placed. They hardly need to assure the delegates of the deep interest they had in the matter, and of their readiness to reconsider it, and to submit this, or any other feasible plan, to the trade at large, in the hope that some plan may be devised which may secure to the workmen those advantages which they now so laudably desire to obtain, at the same time free from the objections which hitherto have been fatal to such arrangements. It was moved "That the decision of the Coal Trade being unfavourable to the establishment of a relief fund in the form which the majority of the miners wish it to take, and as the information we possess at present concerning the National Association is unsatisfactory, we, the miners, establish a relief fund without reference to those parties." The motion was carried, and a committee appointed to carry out the resolution. It was resolved that the general rules drawn out by the committee should include only permanent disablement and fatal accidents. It was intimated that each colliery would have the power of making bye-laws in addition to the general rules, and deciding their individual cases, permanent disablement to commence at the end of six months. It was resolved that the next delegate meeting be held at Durham, and that there be two general meetings—one in the neighbourhood of Durham for that county, and the other at Newcastle for Northumberland.

Several fatal and other accidents have occurred in this district lately, showing the necessity of adopting some permanent measure at once for giving relief in such cases.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MAY 15.—The Iron Trade is quiet, but, on the whole, there is a fair amount of business doing, although there can be no doubt that a good many ironmasters are accepting rates under the official list for iron of pretty good quality. There are fully as many orders in the market, and a few are being given out, for the United States, although the number is very small as compared with the quantity sent there before civil war and hostile import duties all but destroyed the trade. For plates and sheets there is a fair demand. Welsh bars are delivered in the district at 5*l.* 15*s.*, and are used to a considerable extent for hurdles and similar purposes. Probably the works in South Staffordshire are on an average making quite four days a week. In North Staffordshire there is rather more doing than in the South, but the trade in that part of the county is by no means active.

The Hardware Trades of Birmingham and South Staffordshire generally continue, on the whole, dull. There are exceptions, one of these being the manufacture of fire-arms, for which the demand continues active. Some improvement has been experienced in the demand for railway fittings, whilst in some cases the tin and japan trades, for which this is ordinarily a dull season, are rather better. The manufacturers of superior qualities of locks are generally well employed, and in some cases are busy, but many of the Willenhall makers of the commoner sorts are not much more than half employed.

The show made in the International Exhibition by the productions of Birmingham and South Staffordshire naturally excites considerable interest. It is unfortunate that most of the articles published on the subject in the local papers, whilst they display various grades of composition, and some give readable dissertations on the history of the manufactures to which they relate—pleasant summaries of encyclopædic articles—they are deficient in special knowledge of the subjects to which they are devoted, and afford no comparative estimate of the productions of 1862 and 1851, or of the merits of British as compared with foreign hardwares. It is certainly difficult to secure trustworthy comparisons of these kinds; but, as the manufacturers and merchants visit and examine the various specimens with such an acquaintance as will enable them to appreciate their real merits, and to institute that comparison for which it is the special object of the Exhibition to afford an opportunity, a few estimates on these important points may be made. All accounts endorse the complaint previously made, that most inadequate provision has been made for the exhibition of the various productions of the district which lies between Birmingham and Wolverhampton. The articles made in the workshops of this locality are of almost innumerable variety, and many, as metal bedsteads, gasfittings, baths, and other articles in japanned goods, are of considerable size. The space allotted is totally inadequate to anything like a fair display of these productions. The Bessemer iron and steel shown already attracts considerable attention here, and the accounts of the successful application of his process at Sheffield are gradually dissipating the prejudice which the failure of some of the first attempts excited in South Staffordshire. It is not improbable that the process may shortly be employed in that part of this county.

So far, no ironworks in Staffordshire have been rendered capable of rolling the thick plates required for protecting the sides of naval ships; but it is understood that at least one of the leading firms in the district are seriously considering the question of erecting suitable machinery for this purpose. The uncertainty, however, as to the kind of plates which will be ultimately adopted—whether solid masses of iron 5, 12, or even 18 inches thick, or successive layers of plates of a moderate thickness, as some suggest, with intervening layers of yielding substances—checks such undertakings. It is natural that owners of capital should hesitate before expending many thousands of pounds in preparations, while the nature of the ultimate wants of the naval authorities of the various maritime States remain so uncertain. Our American cousins appear likely to demonstrate in actual conflict the best *modus* which attack and defence can adopt.

The replies of the Inspectors of Mines to the questions submitted to them by the Secretary of State on the subject of shafts, and especially of double shafts, in mines, will, no doubt, be fully dwelt on by the *Mining Journal*. It is satisfactory that both in North and South Staffordshire so few instances exist in which mines are worked by single shafts, and that so little difficulty would be experienced in seeing this great element of safety adopted in all cases.

The National Association for the Relief of British Miners is attracting the attention of the miners in this county. On Tuesday evening Mr. W. H. Miller, who is conspicuous as a leader of the miners in cases of strike, addressed a large out-door meeting at West Bromwich, to whom he explained the nature of the new association, and strongly recommended them to support it. Mr. Miller announced that he was about to form a local association, and to receive subscriptions. This looks a little premature, and it is most desirable that no such step should be taken, except with the distinct sanction of those who are directing the operations of the association, and the time appears hardly come for such a step. It seems highly desirable that the employers and the employed should unite together in the matter.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

MAY 15.—There appears to be little prospect of any immediate improvement in the Iron Trade, although many persons contend that recent events which have occurred in America will have the effect of shortening the period of war. A greater depression than that now existing was never known, and iron was never purchased at a cheaper rate. There is a tolerably good enquiry for rails and plates, but in all other departments little or nothing is doing. The Coal Trade exhibits the same dulness as last reported, but many are sanguine that an improvement will be experienced next month, when the metropolitan merchants order for autumn and winter stocks. The London market is reported here to have been greatly over-stocked last season, and this is laid down as one reason for the paucity in the demand this last winter. We have a good demand for coal for gas and marine and locomotive purposes. The depression in the cotton districts, which is ankering so much attention in the country, is taking less than one-half of its customary supplies, and this, coupled with the remarkable openness of the weather, has occasioned the great depression which now prevails, and which, unhappily, is likely to continue.

An accident of a severe nature, which ought to be a caution to miners, occurred at the Brassington Old Lead Mine, on Tuesday. A party of miners had ascended the shaft, and were sitting in the "coe," when either a spark from a pipe, or the snuff of a candle, ignited a bag of gunpowder, which blew off the roof of the building, and dreadfully injured all the four men who were in it, but, fortunately, none of them have died.

A strike has taken place at the Cinder Hill Pits, near Nottingham, and on Tuesday a meeting of miners took place at the Broad Oak Field, Cinder Hill, to consider the recent reduction of wages. It was stated by the different speakers that the wages had been reduced 6½*d.* per ton within the last 15 months, and now the men had received notice of a further reduction of 4*d.* per ton, 128 lbs. to the cwt., and 27 cwts. to the ton, making 1 ton 10 cwts. 3 qrs. 12 lbs. for the ton, at 112 lbs. for 1 cwt. The men resolved to ask for 3*d.* per ton advance, and that they should have a machineman to see that justice was done between employer and employed, and they determined not to return to work until these requirements had been complied with.

Mr. Thomas Shaw, of the Haughton Green Colliery, Denton, has been summoned by Mr. Dickinson, Inspector of Coal Mines, with neglecting to provide sufficient ventilation, and omitting to provide a sufficient number of safety-lamps. Mr. Shaw was fined 20*l.* in all, and the costs.

The progress making in the lead mining interest is slow, and little worthy of notice has been done since our last. On Wednesday Mr. Petherick, the eminent mining engineer, who was appointed to arbitrate in the actions between the Mill Dam Company and the Great Wicklow Company, visited Great Hucklow on Wednesday, and inspected the underground works, with the view of ascertaining the position of the level and the swallow. We understand it is not Mr. Petherick's intention to receive evidence at present. The local stock and share market is dull, and only a limited business has been done throughout the week.

The opening of the Erewash Valley Extension took place on Thursday last, and a direct exit is now afforded for the minerals of this rich valley.

Associations are being formed in Yorkshire for the relief of colliers and other children, and they have been well countenanced and supported by the masters as well as the men. We have heard of no similar effort in Derbyshire at present, but we do earnestly hope that Derbyshire will not be lukewarm in a matter of so much importance.

At a meeting of West Riding coalowners, presided over by Mr. J. T. Fenton, it was resolved to form an association for the relief of the widows and orphans of miners who may hereafter be accidentally killed while following their occupation in coal pits. A committee was nominated to consider the regulations upon which the society should be conducted, and is to report to an adjourned meeting of the coalowners. One suggestion thrown out was that miners, on receiving employment in any of the pits situated within the district of the society's operations, should be required to contribute 1*d.* per week towards the funds, the colliery owners also giving 2*s.* 6*d.* for every 1*l.* subscribed by the men. The association will include within it only such collieries as are situated on the north side of the Lancashire and Yorkshire Railway; but a glance at the map will show that it embrace, amongst other important coal districts, Leeds, Bradford, Halifax, Wakefield, Dewsbury, Manstone, Gildersome, Allerton, Drighlington, Kippax, Garforth, and Normanton.

The Federal, Dutch, and other foreign Governments are now in the South Staffordshire markets enquiring for what, it appears, cannot be supplied to them in that quarter—armour plates for ships of war. The general demand is for 4½-inch plates; but it seems the Federal Government are looking out for plates of a much less thickness.

Mr. John B. Pope, of the Haigh Moor Collieries, near Leeds, has just applied for letters patent for an invention of "Improvements in apparatus for lowering and loading coals, minerals, or other substances." This invention is considered exceedingly ingenious, and when the patent is secure I will give you some descriptive details.

REPORT FROM MONMOUTH AND SOUTH WALES.

MAY 15.—The Coal and Iron statistics lately issued, and the meetings recently held, conclusively prove that both the staple trades of the district are gradually improving. Although a great depression still exists, yet everyone feels convinced that ultimately the demand for all kinds of minerals and metals will be so great that it will fully repay the loss which employers are now subjected to in keeping their works going. Imbued with this conviction, the public boards that control the different ports of South Wales are sparing neither time or money in extending their already unusual facilities, and making every preparation for the reception of an increased trade. The Llanelly Harbour Commissioners are actively engaged in adopting the necessary measures in order that vessels of a larger tonnage than have hitherto visited the port may enter with safety. For the purpose of carrying out these desirable improvements, and for the discharge of existing liabilities, a loan of 10,000*l.* is contemplated. This speaks well of the foresight and commercial enterprise of the Llanelly Harbour Commissioners. There is also a promising future in store for Newport. The West Midland Company are now applying to Parliament for complete running powers over the Monmouthshire line, and also for power to build a new station and other alterations and extensions at Newport. This will involve an outlay of about 130,000*l.* It is expected that the bill will be passed, with a few slight alterations; and there cannot be a doubt as to the ultimate results that will follow such a measure. The West Midland appear determined to make Newport their sea terminus, and a large increase of trade, especially imports, will necessarily follow. The Newport Dock Company support the bill, and are prepared to render every facility to shippers from the Midland Counties, and other districts which the West Midland traverses. The half-yearly meeting of this body was held on Thursday, Mr. Samuel Homfray in the chair. The revenue for the half-year ending Dec. 31, 1861, amounted to 8919*l.* 2*s.* 1*d.*, being an increase of 2133*l.* 16*s.* 7*d.*, as compared with the previous half-year. The coal exports showed an increase of about 27,000 tons, as compared with the previous half-year. Reference was made to the Aberdare branch of the West Midland, which would open up the whole of that vast and rich iron and coal district to Newport, which had not hitherto been the case. The Chairman assured the shareholders that the Dock Company were prepared to give every assistance in their power to increase the trade of the port by means of this important new line. Cardiff continues to stand at the head of the coal and iron ports of South Wales. The returns for the month of April are as satisfactory as might be expected, especially as regards iron, a large increase being manifested on this head. The coal exported amounted to 108,780 tons, and the iron to 19,226 tons; while in March the amount of coal exported was 111,668 tons, and 13,030 tons of iron. There were also exported during April 4857 tons of patent fuel, 872 tons of coke, and 998 quarters of wheat. The totals of coal and iron exported in the four months of this year are 424,394 and 54304 tons respectively.

There is nothing new to report as regards the coal and ironworks of the district for the past week. The Coal Trade remains about the same, while a steady improvement is perceptible in the Iron Trade.

The present session of Parliament promises to be a fruitful one as to increased railway accommodation for the district. Two new committees of the Commons have been named for consideration of the following bills:—Brecon and Merthyr Railway; Briton Ferry Dock and Railway; Dare Valley; Hereford, Hay and Brecon; Llanelly Railway and Dock; Mid-Wales and Manchester and Milford; Swansea Harbour Trust; Swansea and Neath; Carmarthen and Cardigan; Cowbridge Railway; and Merthyr, Tredegar, and Abergavenny Railway. It is quite evident that if all these bills should become law, and no doubt the majority of them will, a vast development of the mineral riches of Wales will necessarily follow. It is cheering, especially so at the present time, to witness such certain indications of a prosperous future for South Wales.

On Saturday last an inquest was held at Dowlais, before Mr. Overton, the coroner, on the body of Morgan Davies, aged 13 years. Deceased met with his death through one of the trams being upset, and falling upon him. The jury returned a verdict of "Accidental Death."

The hearing of the charge of conspiracy brought against Messrs. Thomas, Pughesley, and Rees, by the Gadlys Iron Company, has been again adjourned, and it is rumoured that no further steps will be taken in the matter.

Mr. E. W. Blake, of New Haven, United States, has detected the existence of the new metals, rubidium and casium, in triphiline.

THE INTERNATIONAL EXHIBITION—1862.

The past week has been a dull one at the Exhibition, the number of visitors having been exceedingly small, with the exception of last Saturday, when they were more numerous than on any other day since the opening. We doubt not that the unfavourable weather has been the cause of this, the warm, genial, balmy atmosphere of the previous week having been succeeded by easterly winds and cold drenching rains during the week just passed. Monday next will, however, bring an increase, in spite of the weathers, as the price of admission will then be reduced from 5*s.* to 2*s.* 6*d.*, thus opening the portals of the building to a class of people who have hitherto been unable to pay the high rates charged for admission. In accordance with our promise last week, we now give an account of some of the exhibitions in iron.

Messrs. MOORE and MANBY, of Dudley, and Billiter-square, London, exhibit a large case, containing a great variety of sections of Rolled Iron, numbering upwards of 1000 pieces, all of different sizes, shapes, and forms, suitable for engineering, ship-building, and almost every other purpose for which iron can be used. Iron made into chains, and proved by hydraulic power, 7-16th, ½, ¾, 1 and 1¼ in., bearing respectively a strain of 16½, 26, 39½, and 53¼ tons, without breaking. Boiler-Plates tested by the same process, requiring a power equal to 24 tons per square inch longway, and 22 tons per square inch crossway of the fibre, ere they can be broken; also Boiler-Plates and sheets flanged, and bent hot and cold every way of the grain; 2-inch Round Iron, and several smaller, tied cold into double knots, with ram's-horn test at one end and drawn down fine at the other to form a corkscrew. Deep Stamped Iron made from a flat sheet, and in each case worked cold into various shapes. Iron in the Bloom, and made specially for rifle and gun-barrels, broken by very heavy steam-hammer in order to show the fracture, and ground on the side to show the clearness and cleaness of texture; also a portion of 3-inch armour-plate which was tested at Shoeburyness, receiving the blow of a 40-lb. shot from a distance of 100 yards without showing any sign of cracking. Trade Marks are also exhibited. Messrs. HIRD, DAWSON, and HARDY, near Bradford, Yorkshire, make an extensive exhibit of iron manufactured at the Low Moor Works; also the Coal, Coke, Iron-stone (both raw and calcined), Limestone, and other materials from which the iron is made. Pig-Iron of three different qualities, used respectively—No. 1 for small machine castings; No. 2 for heavy machinery; No. 3 for forge purposes. Refined Iron—Puddled iron, specially adapted for boiler-plates, showing the fracture; also another section, adapted for rails and wheel-tyres. Chain Iron, several specimens of which are bent cold in various ways to show the toughness and strength of the metal; and other specimens bent cold for the purpose of showing the fibre. Boiler-Plates bent cold, with shorn edge on each side; others doubled when hot to show their pliability in working; several specimens punched near the edge showing the original size of the holes; and another punched edge and the other way: several pieces with knots tied cold. Octagon Bars 2½ inches, with holes punched from 7 to 10 inches diameter, with original size of hole at each end of the bar. Tyre Bars broken to show the grain, and double flanged inside and outside when cold. Bar 4 inches square doubled when cold; another 3½ inches, also doubled when cold. Crank Iron several specimens. Sections of "ALTON and FERNIES'" thick-edge plates; the turnings of cast-iron; specimen of rifled grooves in muzzle of an ordinary 32-pounder gun; bars of iron broken in testing-machine; portions of boiler-plates dished and flanged in various ways to show the ductility and strength of the iron; table-top with edges unshorn, rolled from an ordinary ingot; altogether this collection is most interesting, and will amply repay the trouble of an hour's inspection. In the Journal of April 26 we mentioned the double-throw Crank manufactured by the Mersey Steel and Iron Company, and exhibited in Class I., No. 225, which weighs very nearly 25 tons. We now find that this extraordinary forging was made for Messrs. J. PENN and SON, of Greenwich, for an engine of 1350-horse power (which we believe to be the largest ever constructed), and is intended for H.M. MAJESTY'S new iron-clad steam-ram, *Northumberland*. The Monkbridge Iron Company, of Leeds, No. 232, Class I., exhibit some Railway Carriage and Locomotive Axles; also combined Iron and Steel Tyres for the same purposes—the refined Iron and Ironstone in its raw state from which these articles are made. Messrs. TAYLOR BROTHERS, of the Clifton Ironworks, Leeds, have some specimens of Iron made for the Armstrong gun; Locomotive Shafts and Tyres; also pieces of tyre bent cold to show its tenacity and ductility; and another piece bent cold, and then broken by the bend for the purpose of showing the grain.

Messrs. BOLCKAW and VAUGHAN, of Middlesbro'-on-Tees, Yorkshire, and 38, Dowgate-hill, London (No. 31, Class I.), make a very extensive show of specimens from raw and manufactured material, commencing with the coal, coke, and ironstone from their collieries and iron ore works at Woodfield, Whitelee, West Auckland, and Shiddon Lodge; limestone from Bishopley. Also sections and pieces of manufactured iron from their works at Middlesbro', Whitton Park, and Cleaveland; they include pig and refined iron, rails, wide bars broken cold to show the fibre, boiler-plates of several descriptions. No. 1, requiring a mean breaking weight of 26 tons 18 lbs. per square inch across the fibre, and No. 2, requiring 27 tons 11 cwts. 2 qrs. 20 lbs. per square inch in direction of fibre. They also show some malleable iron-plates for flooring, and Ashcroft's patent chairs for fastening rails, such as are used by the South-Eastern Railway Company. In addition to the foregoing, they have a very pretty model of an expanding core bar, from which pipes can be cast 3 inches in diameter, and any size larger; this core bar was patented by Mr. T. W. BOLCKAW of Middlesbro', June 29, 1859 (No. 1546).

The Weardale Iron Company, of the Tow Law Ironworks, near Bishop-Auckland, and Wellington, Thudloe Ironworks, Ferry Hill, and White Lion Wharf, Upper Thames-street, London, No. 394, Class I., make a large and interesting contribution of iron ores, steel, and manufactured iron. There is a very fine block of spathic iron ore from the Rowntree Mine, Weardale, measuring about 3 feet long, 2 ft. wide, and 2 ft. 6 in. high. Also a piece of oxydated spathic ore from the Scotsfield Burn Mine, which is about 3 ft. long by 2 ft. high, and 2 ft. wide; and a third piece of spathic ore, a specimen of carbonate, from Grove Rake Mine. All of these specimens are placed in the ground under the stand of the samples of manufactured iron exhibited by this company. They show sections of four descriptions of pig-iron, viz., mottled pig, slit nail rods, rivets, 4-inch round bolt iron, Thurloe engine horse-shoe iron; a bar 12 inches wide, bent and fractured in the cold, showing the fibre; boiler-plates, cast-steel shafts, and locomotive tyres.

Messrs. BELL BROTHERS, of Newcastle-on-Tyne, No. 18, Class I., exhibit specimens of iron made from the Cleveland ore, at Clarence Works, Middlesborough; these include five different qualities of pig, also some refined iron. Sections of forged iron, bent cold, and broken to show the texture; also a piece of a crane chain manufactured from their iron by Messrs. Hawks, Crawshay, and Sons. This chain was tested and without a strain of 12½ tons before it broke, the regulation strain being only 8 tons according to the rules of the Board of Admiralty. Last week we briefly noticed the articles made from the aluminium manufactured by this firm, and since then they have forwarded for exhibition a very much larger collection; we shall, therefore, now proceed to give a description of them, and defer until next week further remarks upon iron. This is to some extent necessary, as the contributions require a very minute inspection, and a great deal of explanation from the makers. We intend, however, continuing the subject, and shall probably commence our next with a description of the iron manufactured at the Earl of Dudley's Round Oak Ironworks.

With reference, then, to the specimens of Aluminium, exhibited by Messrs. BELL BROTHERS, we may state that aluminium was first discovered in 1827, by Wöhler, but it was then only obtained in the form of a grey powder, and the discovery remained in this state until 1854, when Deville, by improved processes, succeeded in bringing it to somewhat its present state of usefulness. Bell Brothers show the aluminous mineral aluminate of soda, containing 48 per cent. of alumina. The pure oxide of alumina, double chloride of aluminium and sodium, from which the metal is obtained by fusion with sodium—sodium, the metallic base of soda, and ingots of pure aluminium. The large centre object is a representation of Charles I. finding his standard-bearer dead after the battle of Edgehill; it stands on a handsome pedestal of Sienna marble. On the right of the figure is the Cellina Helmet, which we noticed last week, and on the left a beautiful piece of aluminium and aluminium bronze, encircled with the representation of Faith, Hope, and Charity. Faith, on the right hand side, is presented by an angel in a reclining position, with a cross; Hope, on the left hand side, is another angel, also reclining against the side of the piece, holding an anchor; and Charity surmounts the whole, represented by another angel just in the act of taking into its arms what we suppose is meant for a destitute child. At the foot of these are exhibited

...ces, sextant, portable barometer, opera-glasses, thin wire-leaf, large ...l of exceedingly thin substance, twisted ingots, &c., all made of alumi... These show respectively the lightness, ductility, and malleability ...m. There is also a piece of aluminium placed in a solution ...the metal; ...ining sulphur (the substance in the atmosphere that tarnishes silver). ...the same vessel, too, is placed a piece of silver, and this is blackened ...the same treatment, which is without effect upon the aluminium. Re... ...ors, pieces of lace-work, and several other specimens in aluminium, are ...o shown, to represent the various uses to which it may be applied. ...ers. Bell Brothers also exhibit, in Class XXXIII. (No. 6604), two ...ps—Falcon and Grouse, and Gorged Falcon: each of these groups ...cast in one piece of metal.

In Class XIII., we noticed some very beautiful little Hydrometers, con...ted upon Sykes's principle (such as are used by the Customs and ...ise officers for testing spirits), manufactured by Mr. THOMAS BASS, of ...per East Smithfield, Tower-hill.

NEW AND ECONOMIC PUMPS.

Two distinct inventions for improvements in pumps are at present being ...oduced, principally for marine purposes, by Messrs. Warden and Co. ...nningham's patent self-reefing topsails), of New London-street, and ...reat power and economy are claimed for them, we may take the op...unity of describing their principles. The first is a double acting suc...-pump, the second a diaphragm-valve suction-pump, and both are well ...alated to succeed for the purposes for which they are intended; both ...l give a good quantity of water with a moderate power, and each has ...e recommendation.

In the double-action pump the cylinder consists of a V-shaped trough, ...which an inverted Λ-shaped trough works. In the centre of the first-...ned trough there is an orifice to which the suction-pipe is attached, such ...fice being covered by two oblique partitions of a form to fit the V and ...inverted Λ. In these partitions are valves opening outward, and cor...ponding with the fixed valve of the ordinary pumps. At each extre...y of the inverted Λ there is also a valve opening outwards, whence it ...ll be seen that by giving a to-and-fro motion to the inverted Λ, a con...uous flow of water will be obtained, each end of the cylinder in turn be...ming the pumping chamber. After the pump has been at work some ...e, the several parts of the cylinder become well ground in, and fit so ...urately, that the working of it appears to be absolutely improved by ...ar. No packing whatever is required, and yet the water raised is said ...equal 95 per cent. of that which admeasurement would show to be ...able of being contained within the cylinder in any given number of ...okes. The advantages claimed for the pump are very numerous—they ...e simple, not liable to choke, or get out of order; the working parts can ...be got at without removing bolt, nut, pin, or screw; repairs are scarcely ...er required; and the frictional surfaces being plain, solid metal the ...mps are always ready for either constant or occasional work.

In the second, or diaphragm pump, the water is raised by the rise and ...ll of a diaphragm made flexible by any suitable means, a valve being ...ced in the centre of such diaphragm, which covers the chamber in which ...e ordinary fixed valve is placed. The advantage of the pump consists ...the facility with which the pumping power may be augmented without in...easing the length of stroke, and by simply enlarging the flexible diaphragm. ...ey are very portable and easily fixed. The diaphragm is composed of ...flexible material of special manufacture, and will stand a pressure of ...0 lbs. to the square in, or more if required, and is not affected whether ...pt wet or dry, and may be used for pumping hot water. This pump is ...rticularly adapted for contractors work, and is invaluable for ships' use, ...well as for fire-engines and force-pumps generally.

FOREIGN MINING AND METALLURGY.

The official tables of Belgian imports and exports show that, as regards ...g, the increased deliveries to France have largely compensated for the ...minished demand in the direction of Germany. The exportation of the ...rious descriptions of Belgian iron is also on the increase, with the ex...ption of rails, which have to struggle against English competition. The ...crease in the exportation of iron minerals has been compensated for—...d even more than compensated for—by the importations proceeding from the Grand ...chy of Luxembourg, which reached a total during the first three months of the year ...15,431 tons. During the past week the administration of the Belgian state lines pro...ded to the re-adjudication of a contract for the supply of 1200 10-ton wagons. The ...rious industrial establishments maintained approximately the prices which they offered ...me weeks since. Each truck completely mounted costs 92*l*. to 96*l*. each, and this price ...not considered too high, taking into account the fact that the administration of the ...ate lines insists on an oak flooring, and shows great rigour in the fulfilment of contracts. ...e rolling works of the Gallez Company, at Châtelet, have just been put in activity.

From France complaints are made of drought, which may impede the ...orking of some establishments. Prices of iron remain without alteration, ...t there is less demand for hammered and beaten descriptions. A new ...riff, with regard to the conveyance of coal and coke, on the system of the Eastern of ...rance Railway Company, came into force on the 1st inst. The present prices are—...ussian, 18s., and Belgian, 18s. 10d. per ton, delivered at the St. Dizier station. An ...judication for the supply of galvanised telegraphic wire has just taken place at the ...neral administration of telegraphic lines at Paris. It was divided into nine lots, and ...e only was obtained by a French establishment, the eight others being shared by two ...glish firms. The total quantity of wire required was 1250 tons; and the tender of ...Tremeau, of Bigny-sur-Cher, was accepted for one lot of 100 tons, at 29*l*. 15s. 9d., ...d Messrs. Richard, of Manchester, for another lot of 100 tons, at 29*l*. per ton. The ...ickness of the wire in these lots was less than that of the remaining 1050 tons, which ...ere divided into seven lots, of 150 tons each. With regard to the second series of ten...rs, the offer of Messrs. Richard, of Manchester, was accepted at 27*l*. per ton for one ..., and the remaining six lots were taken by Messrs. Johnson, of Birmingham—our ...reign informant has it "John Son," but strange liberties are taken with English names ...the Continent—at 28*l*. 3s. 6d. per ton for two lots, 28*l*. 7s. 6d. per ton for the next ...ree lots, and 28*l*. 11s. 3d. per ton for the last lot.

A commission, appointed for the construction of state railways in the Low ...ountries, are receiving tenders for the metal work of bridges over the ...ssel at Zutphen, and the Meuse at Venlo. Tenders will also be opened ...portly for the construction of the cast-steel work of three bridges required for accom...odating ordinary traffic above the same system of lines. Two of these bridges will be ...the Duchy of Limbourg and two in South Brabant. Specifications are deposited in ...ngland with the consuls of the Low Countries at London, Liverpool, and Newcastle. ...he commission will also proceed on the 27th inst. with an adjudication for the supply ...six great turntables.

The Nouvelle Montagne (Belgian) Company has fixed its dividend for ...861 at 2*l*. per whole share, and 8s. per fifth share. The Turlupu Colliery ...ompany has also declared a dividend of 8s. per share, and the same ...mount will be divided by the Bois Colliery Company (Quaregnon) in respect to the ...ter half of 1861. The Good Hope Colliery Company (workings at Montigny-sur-...ambre, near Charleroi) publishes the results of its operations monthly: thus, in April, ...094 tons of coal were raised, the extraction involving an outlay of 2977*l*.; the expenes ...transport, commissions on sale, &c., were 210*l*.; the general expenses were 108*l*.; the ...eparatory works involved a charge for the month of 420*l*.; and the proceeds of the coal ...d were 4621*l*.: leaving a nett profit of 906*l*. for the month. The profits for the pre...ding three months having been 3056*l*., it follows that the total profits realised this year ...o April 30 were 3962*l*.

There is no favourable change to report in the situation of the foreign ...opper market, little business being doing, while great feebleness is apparent ...n prices. At Paris some lots of Chilian have changed hands at 88*l*. per ...n, but at this price more buyers were not found; in other descriptions there was but ...tle business, and prices were weak. Advices from Havre report some unimportant ...rivals, with scarcely any business. There has been some little demand, however, ex...rienced on the Genoa market, and at Berlin good marks of American, Australian, and ...ussian, have been sought after, although for other descriptions there has been no sale. ...t Hamburg the demand has been feeble, and purchases have been made on a very ...mited scale. There was some activity last month in the Dutch tin market, but busi...ess has only been done with successive reductions of prices, holders having latterly had ...o submit to fresh abatements in consequence of the depression in London, which took ...way the little firmness the market had yet preserved. A slight amelioration has been ...experienced at some points in regard to lead; in France, however, prices have continued ...o drop. Some little quantity has been shipped at Antwerp for the Northern States of ...America; the Berlin and Cologne markets have been calm; at Hamburg nothing very ...important has been doing, but prices have, nevertheless, been maintained.

We have referred above to certain alterations made in the rates charged ...or the carriage of coal on the system of the Eastern of France Railway ...Company. The tonnage of coal and coke carried on the company's lines ...in 1861 was 916,964 tons, as compared with 730,224 tons in 1860, show...ing an augmentation last year of 186,740 tons, or about 25 per cent. In ...which the quantity conveyed was 645,214 tons, and consequently the traffic has increased ...between 40 and 50 per cent. in two years. The mean distance over which each ton of ...coal was carried last year did not vary greatly as compared with 1860, having been 85 ...miles and 87½ miles respectively. The extensive system of the company receives coals ...from a great number of points. Thus the coals of the North of France reach it by Rheims ...and Paris; those of the Sarre, by Forbach and Wissembourg; those of the Ruhr, by ...Wissembourg; and those of the district known as the Centre by Montereau, Gray, and ...Pontarlier. Finally, the company's Mulhouse line traverses the Ronchamp coal basin, and ...consequently secures all the traffic proceeding from that locality.

We must endeavour to find space for another paragraph on M. Petit...grand's agreeable details with respect to mining in the South of Spain. We ...had arrived when we last referred to the subject at the Sierra Almagrera, ...and there we may resume the thread. It appears that many years ago a muleteer and ...a peasant whom the culture of sparte (or esparto) frequently led to the Sierra, com...menced one day examining the ferruginous traces which they had both remarked on the ...way, and they found at a very slight depth pieces of galena, containing 7 to 8 per cent. ...of silver. They discovered by this means the rich thread of the Jaroso, which led in ...1838 to the formation of the Virgen del Carmen Company, and soon created one of the most flourishing districts on the Mediterranean shores. The ardour which had been displayed in the workings of the Sierra de Gador was reproduced to the full extent on the Sierra Almagrera, the same marvellous results were obtained, and the same shamelessness of speculation was manifested. An almost indefinite number of companies, hypothecating their success on the smallest rock covered with an ochrish tint, were formed, and stock jobbing made more fortunes than the minerals of the district, rich as they undoubtedly were. The Sierra is situated on the confines of the province of Murcia and those of Almería, to which it belongs, and it is isolated from the surrounding mountainous chains, its length being 6 to 8 miles, on a width of 3¾ miles, and it falls towards the sea in the direction of Villaricos. Mica schists form its constituent part, and on the east side are found enormous ferruginous masses, which have been sought to be worked concurrently with others of the same nature in the Sierra Cabrera. Some small veins of copper are met with in enclosing rocks, and silvery lead-bearing veins also attract attention. There are not here heaps of mineral entangled with each other, as in the mountains of Gador, Lujar, and Contraviesa, but there are veins, or rather a single vein, the bifurcation of which towards the south forms two distinct groups. The principal vein, the Jaroso, is represented by the mines of Las Animas, Observacion, Virgen del Carmen, La Diosa, Saleeda, Virgen del Mar, Estrella, &c. It is sensibly directed from the north to the south, inclining about 70° to the east. The second group is characterised by the mines of San Gabriel, and others; it follows the same direction as the first, to which it unites itself towards the south, its inclination being 40° to 45° towards the east. There is a third group, known by the name of the Reyla, the vein of which, far less valuable, is independent of the first. The really useful surface of this mining centre embraces at the most about three square miles, and this narrow space, which is by no means worked to the full extent, comprises, nevertheless, more than 1000 concessions, each having its prescribed shaft, and innumerable open cuttings at all points, to reach the bearings and secure a portion of the rich spoil. We will leave to another occasion further details with respect to the Sierra's tempting veins.

REPORT ON THE METALLIFEROUS DEPOSITS OF KUMAON AND GURHWAL, IN NORTH-WESTERN INDIA.—The following is an extract from the report of Mr. W. J. Henwood, F.G.S.:—

"As so little has been done on this formation, and that little scarcely directed to the determination of the points of economic importance, nothing certain can be yet stated regarding the extent of this deposit." . . "Assuredly enough has not been yet ascertained respecting the iron ores of the Bhabur to warrant any expensive experiment on them, but we saw sufficient to convince us that the district was worthy of further examination. A fact of some significance is, however, that but few and trifling traces of the labours of native iron smelters occur in any part of it, although they are numerous enough in every other mining field we have examined in these provinces."

"Limestone is quarried for use within four or five miles of Huldwanee; water-power to almost an unlimited amount may be obtained in the immediate neighbourhood, and fuel sufficient for experimental purposes during, perhaps, seven years, is at hand; but the district does not afford enough for the supply of a large blast-furnace. During the cold season the climate is a healthy one, but as the heat and rain approach it is disagreeable and dangerous; for even the natives, who work there in winter, retire to the upper country as summer advances."

GEOLOGICAL SOCIETY OF LONDON.—May 7—Prof. A. C. Ramsay, President, in the chair. The Rev. R. Stopford Brooke, Fern Lodge, Campden-hill, Kensington; Henry Francis Blanford, late of the Geol. Surv. India; Edward Fitton, Gloucester-crescent, Westbourne-terrace; Frederick Hill, Penhellis, Helston, Cornwall; John Langley King, Wells-street, London; and Charles Rogers, Beaufoy-square, Maida-vale, were elected Fellows. The following communications were read:—

1.—"Note respecting the Discovery of a new and large Labyrinthodont (*Loxomma Allmani*, Huxley) in the Gilmerton Ironstone of the Edinburgh Coal Field;" by Prof. T. H. Huxley, F.R.S., Sec. G.S. Looking over the vertebrate fossils from Burdle House and Gilmerton in the University Museum, Edinburgh, Prof. Huxley came upon some reptilian specimens—a fragment of the hinder part of the upper wall of a cranium and some sternal plates of a Labyrinthodont, which, from the obliquity of its orbits, he names *Loxomma*. The skull would be about 14 inches long if perfect; and the animal about 6 or 7 feet.

2.—"Note on a new Labyrinthodont (*Pholidogaster pisciformis*, Huxley) from the from the Edinburgh Coal Field;" by Prof. T. H. Huxley, F.R.S., Sec. G.S. The specimen on which this new form has been determined was placed in the British Museum by Sir P. Egerton and Lord Enniskillen, who recognised it as reptilian. Mr. Davis, of the British Museum, drew Mr. Huxley's attention to it as being probably Archegosaurian. It is not well preserved, but on careful study proves to be an amphibian allied to *Archegosaurus;* differing, however, from it in the form of the head, the extent to which the ossification of the vertebral column has proceeded, and in the character of the dermal armour. This animal was about 44 inches long.

3.—"On the Land Flora of the Devonian Period in North-eastern America;" by J. W. Dawson, LL.D., F.G.S.

4.—"On some Upper Eocene Fossils from the Isle of Wight;" by Prof. D. F. Sandberger: in a letter to W. J. Hamilton, For. Sec. G.S.

At the next meeting of the society, on May 21, the following papers will be read:—1. "On some Metamorphic Rocks in Banffshire and in East Sutherlandshire;" by Prof. R. Harkness, F.R.S., F.G.S.—2. "On the Geology of the Gold Fields of Nova Scotia;" by the Rev. D. Honeyman: Communicated by the President.—3. "On some Fossil Crustacea from the Lower Coal Measures of Nova Scotia; on *Eurypterus*; and on some Tracks of Crustacea in the Lower Silurian Rocks;" by J. W. Salter, F.G.S.

PATENT SAFETY-FUSE.—Some improvements in safety-fuse have just been patented be Mr. Davey, of Tuckingmill, Camborne. The improvements consist in coating the fibrous material of which the fuse is partly composed with gutta percha or its compounds, caoutchouc, soft metal, or other suitable adhesive materials, and in the employment of wire in the manufacture of safety-fuse, either as a substitute for or in combination with fibrous materials, or as a substitute for or in combination with lead or other soft metal, and in the manufacture of pipes and tubes in combination with lead or other soft metal, gutta percha, caoutchouc, bitumen, or earthenware.

PURIFICATION OF COAL GAS.—Dr. Thomas Richardson, Newcastle-on-Tyne, proposes to dissolve the burnt sulphur ore left as a waste product in the manufacture of sulphuric acid in muriatic acid, and evaporating the solution to dryness, or to drying up the solution with sawdust, charcoal, small coke, gypsum, or the waste burnt sulphur ore, or other oxide of iron ground to powder, and to employ these mixtures with lime or magnesia, in the usual way in the purification of gas.

OBTAINING MOTIVE-POWER.—Mr. E. Taylor, Blackburn, propose to employ a number of weights placed upon a shaft or eccentric, and also a wheel which revolves and changes the position of the weights, the wheel having bowls on which the weights slide, so that as the positions of the weights are changed they gain their leverage and give effect to the wheel, and thus obtain the motive-power, which can be started and stopped, and also governed, by altering the position of the shaft or eccentric.

APPLICATION OF STEAM POWER.—Mr. J. Musgrave, Globe Works, Manchester, proposes an invention which consists in the application of two or more cylinders of small diameters placed in a vertical, horizontal, or diagonal position, and connected direct to a main driving-shaft, or to a second-motion shaft, thereby entirely dispensing with the large first-motion wheels, fly-wheels, large engine-house, and heavy foundations now required.

IMPROVEMENTS IN WHEELS AND AXLES.—Messrs. Allott and Thelwall, of Hull, provisionally specified some improvements in the manufacture of wheel tyres, hoops, and other similar articles. They produce two rings, composed each of a bar coiled in a helical form, the coils being in opposite directions, and the ends tapered off so as to leave an even face on the ends of the helix. One of these rings is fitted within the other, and the seams then cross each other. The blank tyre thus formed is now welded under the steam-hammer, and then finished by rolling in the usual or any other suitable manner. The same gentlemen also propose some improvements in the manufacture of crank shafts and crank axles. The object of the invention is to make the grain of the iron follow the course of the crank and crank pin, in lieu of such grain being parallel to the grain of the shaft or axle, as is the case with cranks cut out of a solid forging. The crank is gradually forged out of the solid bar under the steam-hammer, the use of pressure and bending dies, and the application of end pressure on the shaft, being dispensed with. The same system of forging is equally applicable to the production of other bent articles wherein it is desirable to increase the strength by not disturbing the natural grain of the iron.

WATER V. STEAM.—By a letter from Paris we learn that M. Girard proposes to substitute water for steam in the production of motive power. M. Girard's machine skates over a railway with the greatest ease, all that is necessary being to keep an infinitely thin layer of water beneath the skids; it is said that considerable weights, and even heavily-laden carts, can be propelled at a greater speed than by steam. The Emperor, Empress, and eminent men of every profession have witnessed the experiments, and it seems that the Emperor was so convinced of the advantages of the system that he has ordered a line to be laid down from Reuil to Bongival. We suspect the chief utility of the invention would be in descending heavy inclines.

MINE MACHINERY FOR SOUTH AUSTRALIA.—We understand that the clipper ship *Murray*, now loading in the London Docks, will take out some mining machinery, manufactured by Messrs. Nicholls, Williams, and Co., of Tavistock, for South Australian mines.

THE HINDOSTAN COPPER COMPANY.—The directors, by the last mail, received advices to the effect that a portion of their staff, sent from England, had arrived at Calcutta. The manager at the works states that he was doing all in his power to prosecute the company's operations without delay.

MINING AND SMELTING GLOSSARY.—Now ready, price 2s., a NEW EDITION, enlarged, of THE ENGLISH AND FOREIGN MINING GLOSSARY; to which is added the SMELTING TERMS used in France, Spain, and Germany. Published at the *Mining Journal* office, 26, Fleet-street, and may be obtained through all booksellers and newsmen.

"CORNISH NOTES."—The first edition of the "Notes made during a recent Tour in Cornwall and Devon," by Mr. J. Y. Watson, F.G.S., having been sold, a second edition, revised by the Author, has been printed, and copies, 1s. each, can be had of Messrs. Watson and Cuell, St. Michael's-alley, Cornhill, or at the *Mining Journal* office, 26, Fleet-street, London.

ORIENTAL COMMERCIAL COMPANY.—A company with a capital of 200,000*l*., in shares of 20*l*. each, has recently been constituted under the Joint-Stock Companies Acts, with limited liability, for carrying on the business of commission merchants between this country and the Levant; and, from the earnest and concurrent co-operation which the promoters have met with in the various Levantine ports, rapid and decided success is regarded as certain. A large number of respectable shippers have promised to entrust the management of their interests to the company, and the manager—Mr. Demetrio Pappa—will also bring a large connection with him. Of the proposed capital upwards of 30,000*l*. has already been subscribed. The direction comprises gentlemen well known in connection with the Greek and Levant trade, and agencies have already been established in Greece, Salonica, Alexandria, Cairo, Beyrout, Amsterdam, Constantinople, Ibraila, and Galatz. It was originally intended to carry on the company with shares of 100*l*. each, and the necessary steps are now being taken to alter the Articles of Association in this and certain other details. It is estimated that if the entire capital be subscribed not more than 5*l*. per share will require to be called up.

THE GILVACH COAL COMPANY (LIMITED),
ABERDARE-MERTHYR DISTRICT, CARDIFF, GLAMORGANSHIRE.

Registered under the Joint-Stock Companies Acts, whereby the liability of each shareholder is limited.

Capital £30,000, in 15,000 shares of £2 each.
5s. per share to be paid on application, and 5s. on allotment.

DIRECTORS.

JAMES BROWN, Esq., Mayor of Newport, Monmouthshire.
J. CHURCH, Esq., C.E., Assoc. Inst. C.E., Chelmsford, Engineer of the Gravesend, the Chelmsford, and the West London Junction Gas Companies.
FRANCIS FORD, Esq., London Agent for the Brymbo Ironworks, No. 9, Lawrence Pountney-hill.
CHARLES HOGHTON, Esq., 61, Westbourne Park-villas, Bayswater.
S. LIPSCOMB SECKHAM, Esq., Carlton Lodge, Oxford.
F. R. DE LA TREHONNAIS, Esq., Oak Villas, Norwood.
C. F. S. WORDSWORTH, Esq., Cranford Lodge, Dartford.

BANKERS—The London and County Bank, Lombard-street.
AUDITOR—F. Maynard, Esq., Public Accountant, 19, Broad-street, E.C.
BROKERS—Messrs. Lind and Rickard, 3, Bank Chambers, Lothbury; Messrs. R. Massey and Son, Birmingham.
SOLICITORS—Messrs. Tucker and New, 25, Clement's-lane, Lombard-street.
SECRETARY—Mr. William P. Bellis.

OFFICES,—10, LAWRENCE POUNTNEY LANE, CANNON STREET.

This company is formed for the purpose of working the coal, ironstone, and fire-clay under the Gilvach Farm, situate in the Aberdare-Merthyr district, Glamorganshire.

The property has been secured on very advantageous terms, under a lease for 60 years, at low royalties. It is within 1000 yards of the terminus of the Ely Valley Railway; a wayleave over the intervening property has been secured. The railway communication is thus complete to the port of Cardiff, distant only 17 miles.

Mr. Arthur Owen Davies, the eminent mining engineer of Newport, says:—"A peculiar advantage presents itself for the establishment at Gilvach of a first class colliery, with a comparatively trifling outlay. Some of the principal coal seams lie high and dry, with their outcrops covered only by a few feet of soil. The total quantity of the coal will exceed 20,000,000 tons, two-fifts of which can be worked by day or free drainage levels and shallow pits. The No. 2 vein has been already won on the property by day level. For hardness it is not excelled by any shipped at Cardiff. It is eminently adapted for house, gas, and iron manufacturing purposes. This seam alone will produce 1,000,000¼ tons, which is equal to a daily output of 100 tons for 50 years. The celebrated No. 3 coal, worked in the neighbourhood by the Great Western Railway Company for their locomotive engines, may also be won on this property by a day level. A pit of only 40 fms. will win the famous Abergorky steam coal, which is equal to the best coal in Wales for marine engine purposes. Gilvach is one of the most eligible properties in South Wales for mining enterprise. It contains all the elements requisite to insure commercial success.'

The estimate of profit which accompanies Mr. Davies's report shows a nett return on the capital exceeding 25 per cent. per annum.

A detailed prospectus, with plan and section, and a copy in extenso of the elaborate report of Mr. Davies, can be had on application at the brokers, the solicitors, and at the company's offices.

All applications for shares must be preceded by a payment to the company at their bankers of 5s. per share on every share applied for in part payment of the deposit thereon.

THE SOUTH FOXDALE SILVER-LEAD MINING COMPANY (LIMITED).

Incorporated pursuant to the Joint-Stock Acts of Parliament for Limited Liability.
Capital £25,000, in 5000 shares of £5 each.
A deposit of 5s. per share to be paid on application, and 15s. on allotment.
No call to be made at intervals of less than three months, and not to exceed 10s. per share.
The liability of shareholders is limited to the amount of their shares.

DIRECTORS.

Col. R. Y. BUSH, 55, York-terrace, Regent's-park, London. [of Man.
FREDK. JOHN KING, Esq., 1, Bishopsgate-street, E.C., Reigate, Surrey, and the Isle
HENRY EDWARDS, Esq., Maze-hill, Blackheath, Kent.
Capt. D. R. COMYN, R.N.R., 1, Archer-terrace, East India-road, London.
WILLIAM OGILVIE, Esq., Notting-hill, and 1, Cushion-court, Broad-street, London.
DAVID ROBERTS, Esq., M.D., Great Dover-street, London.
JOSEPH TILSTON, Esq., 2, Lower Kensington-gore.

BANKERS—London and County Bank, 21, Lombard-street, E.C.
SOLICITOR—James Bourdillon, Esq., 30, Great Winchester-street, E.C.
BROKERS—Messrs. James Ewart and Son, 3, Copthall-buildings, Throgmorton st., E.C.
SECRETARY—Mr. William Edwards.

OFFICES,—No. 9A, GREAT ST. HELEN'S, LONDON, E.C.

ABRIDGED PROSPECTUS.

This company is formed for the purpose of purchasing the lease of an extensive sett of richly mineralised property in the Isle of Man, called the South Foxdale, and for fully developing the same, the sett being upwards of four miles in extent, and has been obtained under most advantageous terms.

The success of mining in the Isle of Man is an established fact, of which the profits made by the Foxdale and Laxey Companies are ample proofs—the Foxdale Company having within a few years paid in dividends the large sum of £158,596. The Laxey Company shares of £100 are at present worth £1200 each.

By a reference to published returns, it appears that the ores from the Isle of Man give a higher percentage of lead, and four times the yield of silver per ton, than those of Great Britain and Ireland.

The sett lies south of the Foxdale Mines, and embracing within its limits the shipping port of St. Mary possesses the advantage of a considerable reduction in cost of carriage.

The sett has recently been surveyed by eminent mining engineers—Capt. R. Rowe, of the Laxey; and Capt. M. Grose, Isle of Man, whose report is endorsed by Warington Smyth, F.R.S., F.G.S., Inspector of Crown Mines.

Prospectuses and forms of application for shares may be had of the brokers or the secretary, and all information may be obtained, and samples of the ore seen, at the offices of the company.

MUESELER'S SAFETY-LAMPS.—ORDERS RECEIVED by WM. BIRD AND CO., 2, LAURENCE POUNTNEY HILL, LONDON, E.C., who will furnish prices and references on application.

At the meeting of the Manchester Geological Society, on April 29, 1862, the president (Mr. Joseph Dickinson) said:—"Of the numerous safety-lamps used in mines, Mueseler's lamp appeared to him the best. * * * For testing, the Davy lamp was undoubtedly the best, but for practical working the Mueseler was to be preferred. Thousands of this kind of lamp were used in the Belgian mines."

TO THE SHAREHOLDERS OF SOUTH EXMOUTH.

Exeter, May 12, 1862.

GENTLEMEN,—On my return to Exeter, a month since, I found you working this mine, and I thereupon gave formal notice to your purser that it is being worked without my knowledge or consent, although I am the owner of one-eighth of the sett. As I do not know you personally, I take this mode of communicating the above, and also that at the proper time I shall claim my share of the profits, whatever they may be.

I am, gentlemen, your obedient servant, R. EALES.

NOUVELLE MONTAGNE COMPANY.—At the last general meeting, held at Engis, on the 28th of April, it was resolved that the DIVIDEND for the year 1861 should be FIFTY FRANCS PER WHOLE SHARE, payable as follows:—

25 frs. the 1st July next, as first dividend, on presentation of Coupon No. 10, which, marked with a stamp indicating the payment, will be returned to the holders to enable them to receive

25 frs. the 31st December, 1862, as second dividend.

Also, a DIVIDEND of TEN FRANCS PER FIFTHS of SHARES, payable—5 frs. the 1st of July, 1862, and 5 frs. on the 31st of December, 1862, against the Coupons bearing those dates.

The remaining bonds of the company will be reimbursed from the 1st July next.

The payment of the dividends, also of the bonds drawn, and the coupons of interest, will be made at—

Verviers	At the offices of the company.
London	By Messrs. C. Devaux and Co.
Paris	By Mr. Rougemont de Lowenberg.
Bruxelles	By Messrs. J. P. Matthieu and Fils.
Liege	By Messrs. Nagelmacker and Fils.

VICTOR SIMON, Le Directeur General de la Société.

Verviers, le 30 April, 1862.

LAW LIFE ASSURANCE SOCIETY,
FLEET STREET, LONDON.
ESTABLISHED 1823.

The invested assets of this society exceed £5,000,000; its annual income is £495,000.
Up to 31st December, 1861, the society had paid in claims upon death—

Sums assured	£4,329,378
Bonus thereon	1,115,298
Together	£5,444,676

The profits are divided every fifth year. All participating policies effected during the present year will, if in force beyond 31st December, 1864, share in the profits to be divided up to that date.

At the divisions of profits hitherto made, reversionary bonuses exceeding £3,500,000 have been added to the several policies.

Prospectuses, forms of proposal, and statement of accounts, may be had on application to the actuary, at the office, Fleet-street, London.

February, 1862. WILLIAM SAMUEL DOWNES, Actuary.

ALBERT AND MEDICAL LIFE ASSURANCE,
7, WATERLOO PLACE, PALL MALL, LONDON, S. W.
ESTABLISHED 1838.

The business of the Medical, Invalid, and General Life Assurance Society having been amalgamated with the Albert Life Assurance Company, the united business will henceforth be carried on under the above title.

Accumulated fund exceeds	£500,000
Subscribed capital	447,180
Paid-up capital	137,000
Annual income from life premiums, upwards of	220,000

The new business is now progressing at the rate of more than £25,000 per annum.

From Prof. De Morgan's report upon the last valuation of liabilities (end of 1858), and the statements of accounts, it appeared at that time that the surplus in favour of the Albert business alone, after providing for every liability, was £192,925 2s. 11d.

HENRY WILLIAM SMITH, Actuary.
C. DOUGLAS SINGER, Sec.

THE PARAFFIN, OR MINERAL OIL SAFETY GAUGE,

made for the Asphaltum Company (Limited), ENABLES CONSUMERS to AVOID PURCHASING PARAFFIN or MINERAL OIL of an EXPLOSIVE or DANGEROUS KIND. Price, with a tin oil holder, 1s. 6d. each; forwarded by post upon receipt of 18 stamps.—Apply at the offices of the company, 34, Great Winchester-street, London E.C.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN RE WEST WHEAL TOLGUS MINE.

TO BE SOLD, pursuant to an Order made in a Cause of Haye v. Burrow, dated the 31st day of March last, BY PUBLIC AUCTION, at the Registrar's Office, Truro, on Wednesday, the 28th day of May inst., at Twelve o'clock at noon precisely, 4 (512ths) SHARES of the said defendant,
Of and in the said MINE.

JOHN GILBERT CHILCOTT, Truro,
Agent for John L. Peter, Redruth, Plaintiff's Solicitor.

Dated Registrar's Office, Truro, May 13, 1862.

NEWPORT, MONMOUTHSHIRE.
LOCOMOTIVE ENGINE FOR SALE, BY AUCTION.
ALTERATION OF DAY OF SALE.

MESSRS. JACKSON, NEALE, AND CO. WILL SELL, BY AUCTION, without reserve, at the Westgate Hotel, Newport, Monmouthshire, on Monday, May 19th, 1862, instead of the 12th, as previously advertised, at Twelve for Half-past Twelve o'clock to the minute,

A capital LOCOMOTIVE ENGINE, in good working order, suited to a narrow gauge railway, a six-wheel coupled, saddletank engine, about 19 tons weight, cylinders 15 in. diameter, 18 in. stroke, wheels 3 ft. 6 in. diameter, fitted with one pump in addition to one of Giffard's patent injectors, cylinders, pistons, and valves, new large copper fire-box, and 120 brass tubes, all good.

The engine is at Mr. Marshall's shed, at Bassaleg, near Newport, and can be seen at any time after Monday, the 12th May, by application to Mr. THOMAS DAVIES, engineer, at Bassaleg.

For further particulars, apply to Messrs. M. BRITTAN and SONS, solicitors, or the auctioneers at Bristol.—April 24, 1862.

IMPORTANT MINE SALE.
GREAT WHEAL ALFRED MINE, HAYLE, CORNWALL,
one mile from the port of Hayle.

TUESDAY, the 20th day of May, 1862, at Eleven o'clock, all the VALUABLE ENGINE AND MINE MATERIALS at GREAT WHEAL ALFRED MINE, HAYLE, CORNWALL.

MR. JOHN BURGESS is instructed to SELL, BY PUBLIC AUCTION, the undermentioned VALUABLE ENGINES and OTHER MATERIALS on this EXTENSIVE MINE.

ENGINES.

COPPER HOUSE ENGINE.
65 in. cylinder PUMPING ENGINE, 9 ft. in and 8 ft. out, with TWO BOILERS 12 tons each, and first piece of rod, with strong faggotted caps and side plates.
25 in. cylinder WINDING ENGINE, with ONE BOILER and fittings, powerful crusher attached.
ONE 8 in. cylinder ENGINE, equal beam, with 4 ton BOILER; attached thereto is a BORING MACHINE, a PUNCHING MACHINE, SCREWING MACHINE, and BLAST ENGINE.
ONE 6 in. cylinder ENGINE, with BOILER about 3 tons.
A POWERFUL TURNING LATHE and TOOLS on the most improved principle.
66 ft. leg shears, 4 shieves and brasses.
50 ft. leg red pine shears, deal caps and brasses.
One 10 armed capstan, oak axle, cast-iron centre piece and brasses.
One 8 armed cat head, oak axle, cast-iron centre piece.
One 8 armed capstan, cast-iron axle and brasses.
Three capstan ropes, 12, 10, and 6 in.
Powerful balance bob at copper house shaft, English oak beam, 32 ft. long, 18×19 in. square, with oak king and queen post, faggotted straps and pins.
Balance bob, 30 ft. English oak beam, 19×20, with oak king and queen post, double faggoted strap and pins.
Balance bob, English oak beam, 16×16 in., king and queen post.
Angle bob, oak beam, double faggoted straps and pins.
Two double powerful crab winches. Two single winches.

PITWORK.

28 9 ft. 13 in. pumps.	13 9 ft. 14 in. pumps.
1 9 ft. 13 in. strong sinking windbore.	1 9 ft. 14 in. windbore and doorpice combined.
2 6 ft. 13 in. doorpiece, iron clack seating.	1 3 ft. 14 in. clack seat piece combined.
3 3 ft. 6 in. 13 in. doorpiece, ditto.	1 12 ft. 12 in. working.
2 13 in. H and top doorpiece.	2 12 in. flat bottom windbores.
2 4½ ft. 13 in. flat bottomed windbores.	1 10 ft. 10 in. sinking windbore.
1 9 ft. 13 in. sinking windbore.	3 9 ft. 11 in. pumps.
2 6 ft. 13 in. doorpieces.	1 4 ft. 11 in. flat bottom windbore.
1 13 ft. 13 in. working.	1 11 in. and top doorpiece.
2 13 in. matching.	

PITWORK ON FLOORS.

1 13 ft. 15 in. working barrel.	1 19 in. H and top doorpiece.
1 16 in. and 1 17 in. 9 ft. pumps.	1 19 in. clack seat piece.
1 8 ft. 17 in. flat bottom windbore.	9 9 ft. 19 in. pumps, and 1 matching.
1 9 ft. 18 in. sinking windbore.	1 6 ft. 20 in. flat bottom windbore.
4 9 ft. 18 in. pumps.	1 20 in. doorpiece.
1 13 ft. 18 in. new working barrel.	2 9 ft. 20 in. pumps.
1 6 ft. 19 in. door.	

PLUNGER POLES.

1 14 in. 12 ft. plunger pole and stocking.	1 10 in. 10 ft. plunger pole and stocking.
1 14 in. 10 ft. plunger pole and stocking.	1 7½ in. 10 ft. plunger pole and stocking, stuffing box and gland to match.
1 13 in. 11 ft. plunger pole and stocking.	
1 12 in. 14 ft. plunger pole and stocking.	

BUCKET RODS.

42 fms. best iron bucket rods, 3 in. to 2½ in.	1 pair 5 in. Shropshire rolled rod plates.
4 pair double faggotted main caps, cutters and gibs, and turned pins.	1 pair 4 in. ditto ditto
18 pairs 7 in. faggoted rod plates, 19 ft. to 21 ft. long.	6 pair 6 in. balance box plates.
9 pair 8 in. faggoted rod plates, 19 ft. to 21 ft. long.	A large quantity of rod bolts, flange and door pins.
10 pair 6 in. faggoted rod plates, 19 ft. to 21 ft. long.	A large quantity of 2 ft., 4 ft., and 6 ft. shieves and pulleys.
18 pair 6 in. Shropshire rolled rod plates.	3 shaft gigs.
	1 ditto entirely new, iron conical top.
	10 iron tram wagons, in good condition, and several shaft skips.

MAIN RODS.

12 14 in. main rods.	2 11 in. main rods.
10 12 in. main rods.	1 8 in. main rod.

SHEDS.

Miners' chest shed, 81 ft. long, 12 ft. wide.	Store room in yard, 36 ft. long, 14 ft. wide, 14 ft. high.
Shed over blast engine, 30 ft. long.	
Shed over boring mill, 40 ft. long.	Lean-to shed, 36 ft. long.
Iron house shed, 39 ft. long, 12 ft. wide.	15 jigging hutches and bottoms, all in working order.
Material house, 30 ft. long, 12 ft. wide.	
Flooring 1¼ in., beams 7 in. by 3 in.	

MATERIAL HOUSE.

2 14 ft. 3 in. flat thread shaft screws.	3 powerful hand screws, iron and steel shovels.
Several new winze kibbles.	
3 leading blocks, powerful single, double, and treble blocks, adapted for the heavy working of this mine.	New galvanised jigging bottoms.
	2 to 3 tons old junk, anti-friction grease, oak ladder staves.

IN YARD.

2000 fms. best steam whim chain, size ⅜, 9-16ths, to ⅝.	About 800 fms. of tramroad irons, 2 in. by ½ in.
A very large weighing machine (from 1 cwt. to 5 tons).	4 pair of faggotted yokes.
A quantity of staples and glands, different sizes.	About 20 tons of cast-iron.
Several pairs of faggoted bucket prongs, and brass forms to fit.	About 10 tons of double and treble faggoted iron of all sorts.
About 100 fms. bridge rails.	About 10 tons of sundry old iron.
	Large quantity of ladders, iron and wood staves.

SHOP.

1 smiths' bellows.	Smiths and miners' tools,
4 large anvils.	Large quantity of cast-steel borers.
Large mandrill.	New steel and iron.
2 4 ft. tubes for dry, 30 ft. long, miners' dial, &c.	Thousands of feet of timber, plank, ¼, ½, and whole timber.

Descriptive catalogues will be ready for delivery as soon as possible. Any information required in the meantime can be obtained from Mr. BURGESS, Barncoose, Redruth, Cornwall (the auctioneer); Capt. BUGELHOLE, on the mine; Mr. JAMES HOLLOW, Mining Offices, Leiant, Hayle; or DAVID COHEN, Esq., 5, Bank Chambers, Lothbury, London.

Lunch at Eleven A.M. on the 20th of May.—Barncoose, Redruth, April 30, 1862.

CORNWALL.
SALE OF IMPORTANT AND VALUABLE FREEHOLD PROPERTY, IN THE BOROUGH OF TRURO.

MR. TIPPET WILL SELL, BY PUBLIC AUCTION, at the Red Lion Hotel, in the aforesaid borough of Truro, on the 27th day of May inst., at Two o'clock in the afternoon, in the following or such other lots as may then be determined on for the convenience of purchasers,

LOT 1.—The FEE SIMPLE and INHERITANCE in possession of and in all those substantially built and spacious erections, known by the name of the TRURO TIN SMELTING WORKS, comprising a lofty and well-built stack, and all the works and offices necessary to carry on an extensive smelting business, and capable of smelting from 10 to 12 tons of black tin daily, with a yard thereto attached, and a stream of pure water flowing through the same, formerly in the occupation of the Governor and Company of Copper Miners in England, together also with the yard, immediately opposite the said works, and the quay therein which abuts on the Truro tidal river, which is navigable for vessels of considerable burthen, and where coals, tin, and other produce may be deposited and shipped, and landed free of quay dues and other charges.

These works were built some years ago, at great expense on the most approved plan, and are situated in the most central town of Cornwall, and in the midst of a mining district. They are easily convertible into a brewery, distillery, paper mills, iron and brass foundry, engineering, or shot manufactory, gas-works, or other business requiring extensive accommodation.

If not sold together, the yard and quay, with the workshops and stores under, will be sold in separate lots.

LOT 2.—The FEE-SIMPLE and INHERITANCE in possession of and in all that spacious MALT HOUSE adjoining Lot 1, with store room over, three-stalled stable and loft, with an enclosed yard, and now in the occupation of Mr. S. Miners, maltster.

LOT 3.—All those TWO DWELLING HOUSES near adjoining Lot 2, and suitable for the residence of a maltsman and labourer, now in the occupation of Miss Crossman and W. Bolitho.

LOT 4.—The FEE SIMPLE and INHERITANCE in possession of and in all those THREE DWELLING HOUSES adjoining each other, situate in St. Austell-street aforesaid, and now in the respective occupancy of Jane Benney, John Champion, and others.

These houses, if not sold in one lot, will be sold separately, if desired, for the convenience of purchasers.

LOT 5.—The FEE SIMPLE, with immediate possession, of and in all that stone-built and excellent DWELLING HOUSE and OUTBUILDINGS, with the productive garden thereto attached, situate in St. Austell-street, in the aforesaid borough, now or late in the occupation of Mr. Isaac.

All information required may be obtained on application to the auctioneer, Lemon-street, Truro, or to Messrs. HODGE, HOCKIN, AND MARRACK.
Truro, May 7, 1862. Solicitors, Truro.

NEW WHEAL FRANCES MINE, NEAR PENDARVES, CAMBORNE.

MR. RICHARD GREENWOOD has been favoured with instructions to SELL, BY AUCTION, at NEW WHEAL FRANCES MINE, on Tuesday, the 20th day of May, at Eleven o'clock in the forenoon, the following superior and VALUABLE MACHINERY and MATERIALS, viz.:—

ONE 24 in. cylinder DOUBLE ACTING ROTATIVE CONDENSING ENGINE (nearly new), 9 ft. stroke in the cylinder and 8 ft. at crank, for stamping and pumping, with ONE BOILER 10 tons.

1 stamps' axle, with 12 heads complete; 15 fms. of 6 and 7 in. pumps, fang and bucket rods, balance bobs, 2 cisterns, 2 shaft tackles, 1 horse whim, whim rope, screw plates, with 30 fms. of wood rods; 30 fms. of launders, 20 fms. of iron stave ladders, several large wood sheds, with the dressing-floors and tools complete.

Also, 1 smiths' bellows, anvil, smiths and miners' tools, new and old iron, new and cast-steel, screw stocks, plates and taps, various lots of new and old timber, and a variety of other things for mining purposes too numerous to mention.

The whole of the machinery and materials, as they now stand, will be offered in One Lot, and if not so disposed of they will be sold in the usual way the same day, in such lots as will suit the convenience of purchasers. Refreshments will be provided for purchasers.

For inspecting the same, apply to the agent on the mine; W. J. DUNSTAN, Esq., 5, Adam's-court, Old Broad-street, London; R. H. PIKE, Esq., Mining Offices, Camborne; or at the office of the auctioneer, High Cross, Truro.

May 8, 1862. R. GREENWOOD, Auctioneer.

ANGARRACK CONSOLS MINE, NEAR HAYLE.
ENGINE AND MATERIALS FOR SALE.

MR. LITTLE WILL SELL, BY AUCTION, on Wednesday, the 21st May inst., at Twelve o'clock precisely, the following ENGINE and MATERIALS, viz.:—ONE 42 in. cylindor ENGINE, 8 ft. stroke, oven beam, with BOILER, about 10 tons; 1 8 arm capstan, with oak axle; 1 60 ft. shears, with cap complete; horse whim, and whim rope; 2 horse whim pulleys, about 90 fms. ⅝ crop chain, 24 fms. 1½ in. bucket rods, 5 pair 6 in. strapping plates, 4 10 in. main rods, 1 cisterns, about 50 fms. iron stave ladders, 14 9 ft. 8 in. pumps; 15 9 ft. 6 in. ditto, 1 flat bottom windbores, 1 8 in. sinking ditto, 1 6 in. flat bottom ditto; 1 6 in. plunger pole, 10 ft. long; 1 6 in. stuffing box and gland, 1 6 in. pole case, 1 6 in. H and top piece, 3 8 in. doorpieces, 4 8 in. working barrels, 6 8 in. bucket prongs, screw stocks, wrests winch, a quantity of staples and glands, pump rings, flange bolts and red lead, set offs, 3 collar launders, about 100 fms. wood air pipes, horse whim, water barrel, water barrel, wheel and handbarrows, smiths' bellows, anvil, vice, smiths' tools, barriers, pick and shovel hilts, small scales and weights, large beam of scales, carpenter bench, several lots of useful timber, with all the account-house furniture, &c.

The agent on the mine will show the materials, and for any further particulars apply to S. T. G. DOWNING, Esq., solicitor, Redruth; Messrs. VALLANCE and VALLANCE, solicitors, 20, Essex-street, Strand, and 1, George-yard, Lombard-street, London; and to the auctioneer, at his offices, Redruth.

N.B.—The mine has been well opened for further prosecution. The deep adit has been driven to a great extent, and several highly mineralised lodes have been intersected at this level. A new sett can be obtained from the proprietor, Mr. RICHARD EDMONDS, solicitor, Portland-terrace, Plymouth.—Redruth, May 5, 1862.

IMPORTANT COLLIERIES, AND VALUABLE FREEHOLD ESTATE, AND OTHER LANDS AND PROPERTIES FOR SALE, BY PROPOSAL.

TO BE SOLD, the several EXTENSIVE and well-known current-going sea sale COLLIERIES, FREEHOLD ESTATE, FARM, LANDS, and OTHER HEREDITAMENTS, comprising—

The BYERS GREEN COLLIERY, including the royalty within the Old Park Road and TWO FIELDS (together 9 acres and 27 perches) of FREEHOLD GRASS LAND near to Byers Green.

The NEWFIELD COLLIERY, with the MINES in BINCHESTER and NEWFIELD, and in the northern part of BIRTLEY, severally worked by or through Byers Green and Newfield Pits; and also the FREEHOLD ESTATE of NEWFIELD, containing 151 acres, more or less, whereon is a large FIRE-BRICK MANUFACTORY at which a considerable business is carried on, excellent clay for the purpose being in abundance at the collieries.

The HUNWICK COLLIERY, the PAGE BANK COLLIERY, and the adjoining COAL ROYALTY within 10,000 acres, in South Brancepath.

The SPENNYMOOR COLLIERY, the CHILTON COLLIERY, and upwards of 4½ acres of FREEHOLD LAND, with 120 workmen's houses newly erected thereon.

The COXHOE AND SOUTH KELLOE COLLIERIES, the BOWBURN, HETTON HALL, and OTHER WEST HETTON COLLIERIES, with the FREEHOLD FARM at Quarrington Hill Top, containing 71 acres.

And the CROWTREES COLLIERY, all in the county of Durham.

Together with all and singular the ENGINE HOUSES, ENGINES, MACHINERY, RAILWAYS, COKE OVENS, LIVE and DEAD STOCK, AGENTS' and WORKMEN'S HOUSES, WORKSHOPS, STABLES, GRANARIES, and OTHER ERECTIONS and BUILDINGS to the same several collieries respectively belonging and held therewith.

The several descriptions of coal produced at these collieries are of the best quality obtained in the county of Durham, and are well known in the London and coasting, and foreign markets; and the coke is of the highest reputation, as well throughout England as at several foreign ports.

These properties are being disposed of by order of the directors of the West Hartlepool Harbour and Railway Company, and the produce from the different collieries to be conveyed by sea is intended to be restricted to that company's lines of railway, and the shipping places in connection with the same; the rates for the leadings and shipments being regulated on such terms and conditions as shall be agreed upon with the respective purchasers.

The different collieries will be sold by proposal, and the purchasers will have the option (if they desire it) of paying only a portion of the purchase money at the time of completion of their respective purchases, and the remainder by instalments, with interest at the rate of £5 per cent. per annum, at such rates, and on giving such security for the purchase of the property, as shall be mutually determined.

Particulars, containing the rents, terms, conditions, and provisions reserved and obtained in the several leases and agreements, under which the different collieries, and some of the agents' and workmen's residences as do not belong to the company absolutely, are respectively held, with all other necessary information, will be prepared, and ready for delivery on the 26th inst.; and copies may be had on application to Mr. TIPLADY, solicitor, Durham, by whom all proposals from intending purchasers will be received up to and inclusive of the 1st of July next.—Durham, 13th May, 1862.

SCOTLAND.

EXTENSIVE MINERAL AND GRANITE FIELD TO LET.

The MARQUIS OF BREADALBANE is READY to TREAT for a LEASE of the MINERALS on his ESTATES in the counties of PERTH and ARGYLL. The LEAD MINES at TYNDRUM have been in operation for many years, and are in full working order, with powerful crushing and washing apparatus. Extensive trials have been made in other parts at considerable expense, and the minerals have been proved to include copper, lead rich in silver, from 100 to 200 ozs., and even 300 ozs. of silver to the ton of ore. Several tons of this ore have brought £50 per ton in the English markets. Zinc, chromate of iron, hematite, pyrites, sulphate of baryte, &c. Large quantities of felspar potash have also been found. Smelting and chemical works have been erected on the south side of Lochtay, and water-power is available at almost every point.

Also, TO BE LET, separately from the above if desired, the GRANITE QUARRIES on the LANDS of BARRS, LOCHEATIVESIDE, with right to raise granite on any other parts of the Breadalbane property on Locheativesides, and with the COMMODIOUS BUILDINGS on Barrs, all in good repair. This is one of the largest fields of granite and porphyry in the United Kingdom; the quality is very fine, and any quantity of blocks of the largest size, adapted for harbour and other works, can be raised. The Quarry, which is about 18 miles from Oban, is in good working order, and vessels of considerable tonnage can load in deep water with a crane at the breast of the quarry.

There are several powerful cranes, and a complete assortment of tools, which will be handed over to a tenant on entry, at valuation.

It is believed that many other quarries close to the shore, and equally convenient every way, might be worked to much advantage.

Immediate entry may be had, and every encouragement will be given to an enterprising party.

Apply to Messrs. DAVIDSON and SYME, W.S., Edinburgh; or JAMES F. WILLIAMS, Fracks, Aberfeldy.—N.B. The latter of whom will give directions for showing the different localities.—May, 1862.

TO CAPITALISTS AND OTHERS.—TO BE SOLD, PRIVATE CONTRACT, the CAE HOWEL SLATE and SLAB PROPERTY, which is situated within six miles of the shipping port of Carnarvon, in the vale of Bettws Garmon, and consists of about 15 acres, the whole extent of which is traversed by a handsome bed of slate and slabs, of a fine green colour. A moderate quantity of hones might also be easily manufactured on the property. Abundance made by the owner have satisfactorily proved the value of the property. Abundance of water for working machinery can be obtained, the property being bounded on one side by the Cwellyn River, and within a quarter of a mile of Cwellyn Lake, one of the beautiful lakes in Wales, and celebrated for its charfish, &c.—Further particulars to be obtained of, and offers will be received by, Mr. R. OWEN, quarry agent, Ty Hen, Bethesda, near Bangor.

ON SALE, a FREEHOLD SLATE and SLAB PROPERTY near PORTMADOC, CARNARVONSHIRE. The above property offers an unusual opportunity for capitalists, as there is upon it a large body of rock and slate running through, with every facility to work the quarry to a great advantage, being on the road, within a short distance of the above harbour, and close to the Welsh coast of railway, just passed. There are other promising quarries in operation in the immediate locality. Water-power can be got on the property.—Prospectuses, reports, every information, may be had by capitalists, on application by letter, addressed "T.S.P.," Post-office, Tremadoc, North Wales.

SOUTH WALES COAL.—TO BE LET, the COAL and IRONSTONE UNDER the LANDS of Lieut.-Col. Cowell Stepney, situate on the GWENDRAETH VALLEY. The Gwendraeth Canal passes through the property and communicates with the sea and South Wales Railway. It is probable that a line of railway will be made through this property.—For particulars, apply to Messrs. ROSSER, Mining Engineer, Llanelly.

and ROSCOE, 36, Lincoln's Inn-fields, London; or to Mr. WILLIAM

MINERALS TO BE LET.—The MINERALS UNDER MAESTEG-ISHA FARM, at MAESTEG, in the parish of Langonnet, in MORGANSHIRE, with the several pits and levels thereon. The farm is 245 acres, thereabouts, and contains most VALUABLE SEAMS of COAL and IRONSTONE. Several of the seams have been won and worked, and a large output of coal and iron could in a short time be obtained at a small expenditure of capital, and at a moderate cost of working; and as the Llynvi Valley Railway, which communicates with the South Wales Railway at Bridgend (distant about seven miles) passes over the farm in the most convenient direction for working the minerals, the same could easily be worked, and the produce conveyed to market.—For further particulars, and to treat for the same, apply to Mr. W. LEWIS, solicitor, Bridgend.

TO BE LET, the MINERALS UNDER the TRECASTLE ESTATE, in the county of GLAMORGAN. The Trecastle estate is 565 acres in extent, and is close to the Llantrissant and Cowbridge stations on the South Wales Railway, by which railway it is bounded on the north. The coal has been proved, and is of first-rate quality. Hematite iron ore of the richest quality is now being worked on a large scale in the immediate neighbourhood, and it is believed to lie under the Trecastle estate also. Being on the South Wales Railway, and only about 11 miles from the port of Cardiff, the produce can be conveyed to market with great facility, and at small expense.—For further particulars, and to treat for the same, apply to Mr. W. LEWIS, solicitor, Bridgend.

BEDFORD IRONWORKS, TAVISTOCK.

NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE. They also MANUFACTURE STEAM ENGINES of every description on the newest principle. Iron and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description.

ELLIS LEVER, WEST GORTON WORKS, MANCHESTER, INVENTOR and SOLE MANUFACTURER of the FLEXIBLE TUBING, for VENTILATING SHAFTS and EXPLORING DRIFTS. IMPROVED BRATTICE and DOOR-CLOTH in ANY WIDTH, for AIR COURSES in MINES.

Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID, FOR REMOVING AND PREVENTING INCRUSTATION IN STEAM BOILERS, LAND AND MARINE. F. S. EASTON AND G. SPRINGFIELD, Patentees and Sole Manufacturers, 37, 38, and 39, WAPPING WALL, LONDON, E., or of their Agents in the principal towns of Great Britain and the Colonies.

TO COAL OWNERS AND COKE BURNERS.

HACKWORTH'S PATENT COAL WASHER, OR PURIFIER.—This MACHINE will EXTRACT the SHALE and ALL ANY IMPURITIES from SMALL COAL at a COST of TWOPENCE PER TON. For particulars and references, apply to the makers, A. and T. FAY, Temple-gate Works; or to Mr. Jos. RIDER, Basinghall-street, Leeds.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, both in cost in working, as well as the MOST DURABLE and EFFICIENT MACHINE Yet Invented. Complete machine, capable of washing from 25 to 50 tons per diem (according to quality), £75.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, C.E., Beaufort-buildings, Strand, London.

A MODEL may be seen at Mr. EDWARDS's office, Beaufort-buildings.

HALL BROTHERS beg to intimate that, having become SOLE LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD of PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

BARR AND SONS, 17 and 18, CORNHILL, respectfully SOLICIT a VISIT to their magnificent ESTABLISHMENT. The ground floor is particularly devoted to the display of FINE GOLD JEWELLERY, GOLD and SILVER WATCHES, and FINE GOLD CHAINS.

The SILVER PLATE DEPARTMENT is in the gallery of the building, and consists of every article requisite for the table and sideboard.

The magnificent show-rooms is displayed a large and beautiful stock of ARGENTINE PLATE, the manufacture of which has stood the test of 20 years' experience.

Barr and Sons have also fitted up a separate show-room for the display of DRAWING AND DINING ROOM CLOCKS of the most exquisite designs. Books containing drawings and prices may be had upon application.

BARR AND SONS, 17 and 18, CORNHILL, LONDON

ASSAYS AND ANALYSES OF EVERY DESCRIPTION Conducted by JOHN MITCHELL, F.C.S., M.G.A. (late Mitchell and Rickard), Author of "Manual of Practical Assaying," "Metallurgical Papers," &c. Communications and samples to be addressed (free) to Mr. MITCHELL, care of Mr. Allan, 28, Moorgate-street, London, E.C.

CREASE'S PATENT EXCAVATING MACHINERY, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to cut through any rock of average hardness at a minimum rate of 1 fm. per diem, and 6 feet shafts at the rate of 2 fms. in three days.

MR. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an entire reduction of time and great saving in cost.

Applications to be addressed to Mr. GEORGE T. CURTIS (sole agent), 17, Gracechurch-street, London, E.C.

"Providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and scientifically selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

PATENT BITUMINIZED GAS, WATER, AND DRAINAGE PIPES.—These PIPES POSSESS all the PROPERTIES NECESSARY for the CONVEYANCE of GAS and WATER, and also for DRAINAGE PURPOSES—viz., GREAT STRENGTH, GREAT DURABILITY, and PERFECT INOXIDABILITY, being non-conductors are not affected by frost, like metal pipes. They are proved to stand a pressure of 220 lbs. on the square inch (equal to 500 ft. head of water), are one-fourth the weight, and considerably cheaper than iron pipes. They are made in lengths, and the joinings are simple and inexpensive. These pipes have been in use in France, Spain, and Italy nearly three years, where the demand for them is very great. The opinions of the press on a public test at the Houses of Parliament, before a large number of engineers and other scientific gentlemen, may be had, with further particulars, at the office of the company, on application to Mr. ALEX. YOUNG, 14A, Cannon-street, London, E.C., where sample pipes may be obtained for trial.

GOLD GETTING MACHINES, for Nova Scotia. Also, the NEW PATENT HYDRAULIC PRESS, important to shippers, packers, and merchants, weighing only a few hundredweights instead of tons. Can be seen at the Inventor's, J. WALKER, 17, Cowper-street, City-road.

TO INVENTORS.—All INTENDING PATENTEES should PROCURE the PRINTED INFORMATION regarding PATENTS, their COST, and the MODE of PROCEDURE to be adopted, ISSUED GRATIS by the GENERAL AGENT COMPANY (LIMITED), 71, FLEET STREET, LONDON.

R. MARSDEN LATHAM, Sec.

THE MINING REVIEW, AND JOURNAL OF COMMERCE, TRADE AND MANUFACTURE, SCIENCE AND THE ARTS.

Wednesday, March 26, 1862. Subscription, £1 1s. annually. Price 6d. stamped.

RAILWAYS AND MINES, Capitalists who seek safe and profitable investments, free from risk, should act only on the soundest information. The market prices for the day are for the most part got up by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the money market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range for profit than other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £15 to £25 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The Editor has devoted special attention to railways and mines, afford every information to investors, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment; we will, therefore, forward, upon receipt of Post-office order for 5s., the names of six dividend and six progressive companies that will, in our opinion, well repay capitalists for money employed.

MESSRS. TREDINNICK AND CO., STOCK and SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES, 78, LOMBARD STREET, E.C.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON publishes a QUARTERLY REVIEW OF BRITISH MINING, at the same time the POSITION and PROSPECTS of the MINES at the end of the Quarter, the DIVIDENDS PAID, &c.; price One Shilling. RELIABLE INFORMATION and ADVICE will at any time be given by Mr. MURCHISON, either personally or by letter, at his Offices, No. 117, HIGH OPSGATE-STREET WITHIN, LONDON. Copies of the above publication can be obtained.

OPINIONS OF THE PRESS ON MR. MURCHISON'S WORK ON BRITISH MINING, PUBLISHED IN 1856.

"Murchison's new work on British Mines is attracting a great deal of attention and is considered a very useful publication, and calculated to considerably improve the character of home mine investments.—*Mining Journal.*

"The book will be found extremely valuable.—*Observer.*

"A valuable guide to investors.—*Herapath.*

"Mr. Murchison takes sound views upon the important subject of his book, and has done it, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unnecessary outlay of capital in mines.—*Morning Herald.*

"A valuable little book.—*Globe.*

"Special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle.*

"A guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph.*

"Parties requiring information on mining investments will find no better and safer inquirer than Mr. Murchison.—*Leeds Times.*

"—Welshman.

"Those who wish to invest capital in British Mines, this work is of the first importance.

"Any who have invested, or intend to invest, in mines, would do well to consult this useful work.—*Ipswich Express.*

"Persons desirous to invest their capital in mining speculations will find this work a useful guide.—*Warwick Advertiser.*

"We believe a more useful publication, or one more to be depended on, cannot be found.—*Falmouth Herald.*

"Persons interested in mining affairs, or who are desirous of becoming speculators should obtain such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald.*

"Every person connected, or who thinks of connecting himself, with mining speculation should possess himself of this book.—*North Wales Chronicle.*

"Is full of carefully compiled and reliable information relative to all the known mines in United Kingdom.—*Sheffield Free Press*

"—Bath *Express.*

"Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Plymouth Journal.*

"The work enables the capitalist to invest on sound principles; in truth, it is an excellent guide.—*Stockport Advertiser.*

BY HER MAJESTY'S ROYAL LETTERS PATENT

MESSRS. ALLCHIN AND SON, PATENTEES and MANUFACTURERS of an IMPROVED STEAM SUPERHEATING APPARATUS, SUITABLE for PORTABLE, LOCOMOTIVE, STATIONARY, and MARINE BOILERS. Can be applied to old as well as new, EFFECTING a SAVING in FUEL of THIRTY-FIVE to FORTY PER CENT., and a surprising INCREASE in the POWER of the ENGINE, likewise a REDUCTION of TWENTY-FIVE to THIRTY PER CENT. in FEED WATER.

TO BE SOLD, a bargain, a 10 horse BEAM CONDENSING ENGINE and BOILER, in good working condition. Price, £50. The room is required, as a larger engine has been supplied.—For particulars, apply to ALLCHIN and SON, Globe Engine Works, Northampton.

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO., MIDLAND WORKS, BIRMINGHAM. BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS. IN STOCK—FOR SALE OR HIRE.

RAILWAY WAGONS.—WILLIAM HARRISON AND CAMM HAVE ON HAND RAILWAY, COAL, COKE, AND MINERAL WAGONS, ON SALE OR HIRE, AT THE ROTHERHAM WAGON WORKS, MASBRO'.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS RAILWAY WAGONS FOR HIRE. Apply to the SECRETARY, 3, Newhall-street, Birmingham.

TO RAILWAY COMPANIES, CONTRACTORS, COAL AND IRONMASTERS, WAGON BUILDERS, &c.—The BEST and CHEAPEST LOCOMOTIVE GREASE is MANUFACTURED by BUCKNELL, CHESTERFIELD. Only one quality made. A trial is solicited. References given to some of the principal coal owners in the district. Sample casks from 2 cwts. upwards.

Chesterfield, February 6, 1862.

NOTICE TO RAILWAY COMPANIES.—A RAILWAY SIGNAL of a NOVEL DESCRIPTION (patented) is NOW IN OPERATION on the MANCHESTER AND ALTRINCHAM RAILWAY, which GIVES NOTICE of the APPROACH of a TRAIN HALF A MILE OFF, and, if required, can announce it at any other given distance. It is novel and simple in its construction, not a single complicated movement in it, and when laid down will not require repairs for years. A model may be seen a. the *Mining Journal* office, 26, Fleet-street, London, in the course of a week, and a gentleman will shortly call on the different railway companies centering in the metropolis to give any required explanations.

JOB TAYLOR AND CO., SWAN FOUNDRY, OLDBURY, NEAR BIRMINGHAM, SOLE PROPRIETORS of HINTON'S PATENT CUPOLA, which CONSUMES FIFTY PER CENT. LESS COKE than any cupola yet invented. MAKERS of ALL KINDS of MACHINERY connected with the GRINDING and TEMPERING of EVERY SORT of CLAY or MARL, and for the MANUFACTURE of BRICKS, TILES, DRAIN PIPES, &c. Also, of HIGH and LOW PRESSURE STEAM ENGINES of any dimensions, and of GENERAL MACHINERY.

SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

GEORGE WHITEHOUSE (late James Colley and Sons), MANUFACTURERS of BOLSTER PINS and BOXES, BOLTS and NUTS, WOOD SCREWS, LIFTING JACKS, RAILWAY SPIKES, RIVETS, and EVERY DESCRIPTION of RAILWAY FASTENINGS, HOPE WORKS, WEST BROMWICH. (ESTABLISHED 1815.) LONDON AGENTS,—MESSRS. R. AND W. PULLING, 10, NEW BROAD STREET MEWS, E.C.

WATER PRESSURE ENGINES.

WILLIAM J. SMITH, ENGINEER, BELMONT, NEAR DURHAM

Begs most respectfully to CALL the ATTENTION of LEAD MINE PROPRIETORS and OTHERS to his IMPROVED WATER PRESSURE (HYDRAULIC) ENGINES, which are ADAPTED for both SURFACE and UNDERGROUND OPERATIONS. The cylinder is placed horizontal, which, with winding drum and pumping apparatus, are fitted on strong cast-iron bed plates, bolted on Memel timber foundation frame. They are made from the very best material, and extra strong in all their parts, fitted with improved slide pistons, slot link motion for reversing, and can be managed by any ordinary workman.

The above engines have been at work pumping and winding in several of the lead mines of Alston Moor, Cumberland, during the last twelve years, and are giving the utmost satisfaction.

Prices and full particulars may be obtained on application, and contracts undertaken by the above for the erection and completion of those engines in any part of the kingdom, guaranteeing the same for any reasonable period.

CORNISH BOREK STEEL.—Upwards of ONE HUNDRED AND SIXTY MINES are SUPPLIED with this STEEL, and the DEMAND for it is RAPIDLY INCREASING.—For terms, apply to R. MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire.

CYANOGEN STEEL, CAST STEEL, SHEAR STEEL, and IMPROVED FOREST L BLISTER STEEL supplied to order by ROBERT MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire. Address to the Works, Coleford.

TEST OF WIRE-ROPE AT LIVERPOOL.—The value of Messrs. Hutchings's statement, relative to a test of their manufacture, will be properly estimated when it is known that the ropes were brought down from London specially prepared for the purpose, and not taken promiscuously from their stock, as the samples tested in October were.

The following, extracted from the *Mining Journal* of November 10, 1860, shows the relative strength of the different makers' ropes on that occasion. The samples tested were privately purchased some time previously, and spliced for testing by Newall and Co.'s workmen. The test took place in the presence of representatives from the manufacturers, reporters for the press, and a large number of gentlemen connected with mining and shipping in Liverpool:—

	SIZE OF ROPE TESTED.	
	3½ inch.	2½ inch.
Garnock, Bibby, and Co.'s broke at	18 tons 5 cwts.	8 tons 15 cwts.
R. S. Newall and Co.'s	16 „ 10 „	7 „ 15 „
A. J. Hutchings and Co.'s*	11 „ 10 „	5 „ 0 „

* Messrs. Hutchings's samples were from 1-16 to 3-16 over size.

From this it will be seen that the breaking point of Garnock, Bibby, and Co.'s ropes was on the average 13 per cent. over the guaranteed strain, while those of Hutchings and Co. were 30 per cent. below it.

GARNOCK, BIBBY, AND CO., SWAN HEMP AND WIRE-ROPE WORKS, CHAPEL STREET, LIVERPOOL.

Flat and round wire-ropes of steel and charcoal iron for mines, inclines, &c., of first quality wire, and highest standard of strength.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards, PARTICULARLY ADAPTED for MINING PURPOSES. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E. Copper wire covered with silk, cotton, or any other material, to order.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

AYTOUN'S PATENT SAFETY CAGE AND HOIST. CHANGE OF LICENSE FEE.

The present LOW RATE of LICENSE FEE, £1 per cage, will be CONTINUED till the CLOSE of the INTERNATIONAL EXHIBITION, where facilities will be afforded to parties interested to assure themselves of the value of the invention. A FULL SIZED SAFETY CAGE will be there EXHIBITED in ACTION, and may be subjected to whatever tests parties may desire. Also, a VARIETY of MODELS, SHOWING the ADAPTATION of the SAFETY PRINCIPLE to CAGES of VARIOUS CONSTRUCTIONS, and to GUIDE RODS of IRON as well as of WOOD.

Parties having thus had an opportunity of assuring themselves of the trustworthiness of the safety cage, and of providing themselves with all the licenses they may require at a low figure, the patentee proposes, immediately on the close of the Exhibition, to raise the license fee to £6, £7, and £8 per cage, according to the weight it is calculated to carry. This will enable him to set on foot an active canvass for the introduction of the safety cage into every mining district of the kingdom, a measure plainly impossible with the present low fee of £1.

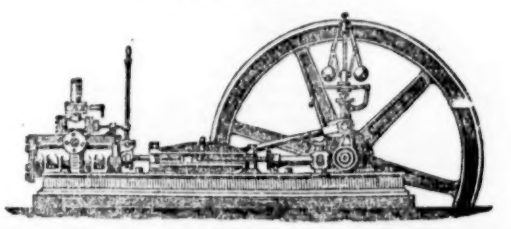
The patentee has also the satisfaction of saying that he has now made arrangements with the well-known firm, Messrs. James Tod and Son, engineers, Edinburgh, which will enable him to furnish safety cages, calculated to carry from 12 to 15 cwts. of coal or ironstone, at £10 each, and other sizes in proportion. As the carriage of a cage by rail to the central parts of England does not exceed 10s., the cage may be delivered in almost any locality for a sum not exceeding 10 guineas, exclusive of the license fee, which at present is only 1l. Coal and ironmasters, therefore, would do well, at this time, to provide themselves with one, which, on being tried in their pits and found to answer, would serve as a model for making others. By sending the order through the patentee, they will have the advantage of his personal superintendence.

To those who prefer getting them made on their own premises, working drawings or models will be sent, which will enable any ordinary workman to construct the safety cage easily.

In view of any further attempt of the Legislature to make the use of safety cages imperative, it would seem advisable to secure licenses at the present low rate for as many as are required.

Apply to the patentee, ROBERT AYTOUN, 3, Fettes-row, Edinburgh.

MESSRS. E. PAGE AND CO., VICTORIA WORKS, BEDFORD, AND LAURENCE POUNTNEY PLACE, CANNON STREET, LONDON MANUFACTURERS OF



HIGH PRESSURE STEAM ENGINES, from 2½ to 30 horse power, and upwards, adapted for MINING and GENERAL PURPOSES. Prices and full particulars sent on application.

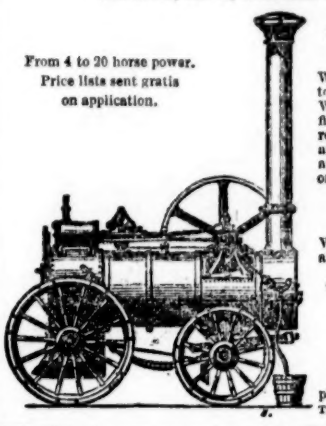
CLAYTON, SHUTTLEWORTH, AND CO., AGRICULTURAL AND GENERAL ENGINEERS, LINCOLN, and 78, LOMBARD STREET, LONDON.

MANUFACTURERS OF

PORTABLE and FIXED STEAM ENGINES,

Which are adapted for every purpose to which steam-power can be applied. When intended for winding they are fitted with reversing link motion and requisite gearing. The portable engines are easy of removal from place to place, and may be set to work immediately on arrival.

From 4 to 20 horse power. Price lists sent gratis on application.



COMBINED THRASHING MACHINES,

Which dress the corn ready for market at one operation.

GRINDING and MORTAR MILLS, SAWING MACHINERY, PUMPS for IRRIGATION and MINING PURPOSES.

Full particulars and estimates supplied on application to CLAYTON, SHUTTLEWORTH, and Co., as above.

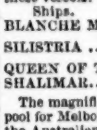
PATENT PLUMBAGO CRUCIBLES.—The crucibles manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY have been in successful use for many years by some of the largest ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The great SUPERIORITY of these melting pots consists in their capability of melting on the average 35 to 40 pourings of the most difficult metals, and a still greater number of the ordinary character, some of them having actually been worked for the EXTRAORDINARY number of 96 heats. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other kind, thereby SAVING more than FIFTY PER CENT. in fuel, time, and labour. Lasting as they do for such a length of time, the saving of waste is also very considerable.

The company have recently introduced a CRUCIBLE SPECIALLY ADAPTED for MALLEABLE IRON MELTING, the average working of which has proved to be about seven days.

CRUCIBLES for STEEL MELTING are also made, which save nearly 1¼ ton of fuel to every ton of steel fused.

The Patent Plumbago Crucible Company likewise manufacture and import clay crucibles, muffles, portable furnaces, &c., stove backs, all descriptions of fire-standing goods, and every requisite for the assayer and dentist.

For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea, Works, London, S.W.



AUSTRALIA AND NEW ZEALAND WHITE STAR EX-ROYAL MAIL CLIPPERS, SAILING FROM LIVERPOOL to MELBOURNE on the 1st and 20th of every month.

*** Passengers holding Victoria passage warrants will be forwarded to Melbourne by these vessels.

Ships.	Destination.	Register.	Burthen.	To sail.
BLANCHE MOORE	Melbourne.....	1500	4500	May 20.
SILISTRIA	Victoria, Vancouver's Island	1700	5000	June 10.
QUEEN OF THE NORTH....	Melbourne.....	1630	5000	June 20.
SHALIMAR.....	Melbourne.....	1700	5000	July 20.

The magnificent clipper ship, *Blanche Moore*, will be again dispatched from Liverpool for Melbourne as the packet of the 20th May. She was constructed expressly for the Australian passenger trade, by Donald McKay and Co., the well-known builders of the *Lightning*, *Chariot of Fame*, and other celebrated clippers, of the best materials, and equipped with all the most recent improvements. Her various voyages have proved her to be a fast and comfortable ship, and her accommodations for all classes of passengers are of the most complete and satisfactory character. Saloon passengers are provided with bedding, linen, and all necessaries. Passengers embark on the 21st May.

For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 31, Water-street, Liverpool; or to GRINDLAY and Co., 124, Bishopsgate-street, and 55, Parliament-street; or SEYMOUR, PEACOCK, and Co., 116, Fenchurch-street, London.

Willox's Australian and New Zealand hand-books sent for two stamps.

BASTIER'S PATENT CHAIN PUMP, APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine, as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.

2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.

3.—It occupies a very small space.

4.—It raises water from any depth with the same facility and economy.

5.—It raises with the water, and without the slightest injury to the apparatus sand mud, wood, stone, and every object of a smaller diameter than its tube.

6.—It is easily removed, and requires no cleaning or attention.

A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the USE of his INVENTION.

OFFICES, 47, WARREN STREET, FITZROY SQUARE.

London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER, C.E.

CUBA MINERAL TURPENTINE (No. 1)—TO VARNISH MAKERS, INDIA RUBBER MANUFACTURERS, &c.—The ASPHALTUM COMPANY (LIMITED) MANUFACTURE a SPIRIT which is an EXCELLENT SOLVENT for VARIOUS MATERIALS EMPLOYED in VARNISH MAKING, INDIA RUBBER, &c. Uniform quality guaranteed.—Apply at the offices of the company, 34, Great Winchester-street, London, E.C.

CUBA MINERAL TURPENTINE (No. 2)—TO PAINTERS, OIL AND COLOURMEN, BUILDERS, CONTRACTORS, &c.—The ASPHALTUM COMPANY (LIMITED) MANUFACTURE a SPIRIT for PAINTING PURPOSES, which is a COMPLETE SUBSTITUTE for TURPENTINE SPIRIT, and ONE-THIRD CHEAPER. Mixes thoroughly with oils, turpentine, &c., and "flats" perfectly.—Apply at the offices of the company, 34, Gt. Winchester-street, London, E.C.

PARR'S LIFE PILLS are particularly recommended to all persons who are suffering from headache or indigestion, whether arising from constitutional inaction, biliary derangement, or over indulgence at the table. They have never been known to fail in affording immediate relief. May be obtained of any medicine vendor, in boxes 1s. 1½d., 2s. 9d., and in family packets 11s. each. Directions with each box.

DR. MARSTON, M.R.C.S., L.S.A., on Nervous Debility, Impediments to Marriage, and all secret diseases, showing a simple yet certain means of restoration to vigorous health. Price 6d., post free, direct from the author, 47, Berners-street, Oxford-street, London. Consultations, Eleven to Two, and Four to Eight daily.

DR. SMITH has just published a free edition of his valuable work, the PRIVATE MEDICAL FRIEND (116 pages), on the Self Cure of Nervous Debility, Loss of Memory, Dimness of Sight, Lassitude, &c., resulting from the errors of youth. Sent post free to any address, on receipt of a directed envelope, enclosing two postage stamps.—Address, Dr. SMITH, 8, Burton-crescent, Tavistock-square, London, W.C.

THE NEW FRENCH REMEDY, THERAPION, for nervousness, debility, and exhaustion. In four weeks restores manhood to the most shattered constitution, with marvellous certainty. Price 11s., or four times the quantity for 33s. Agents for England, THOMAS and Co., 7, Upper St. Martin's-lane, London, by whom it will be sent anywhere, carefully packed, on receipt of Post-office order.

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
1000	Alderley Edge (Cheshire) [L.]*	10 0 0	60		7 8 6	0 15 0	Mar. 1862
4000	Bedford United (copper), Tavistock†	2 6 8	5		12 13 0	0 1 6	Mar. 1862
240	Boscean (tin), St. Just†	20 10 0	60		36 10 0	1 0 0	Mar. 1862
200	Botallack (tin, copper), St. Just	91 5 0	250		445 15 0	2 10 0	Feb. 1862
1000	Carn Brea (copper, tin), Illogan†	15 0 0	72		271 10 0	2 0 0	Jan. 1862
200	Cefn Cwm Brwyno (lead), Cardigansh.	33 0 0	33		9 0 0	4 0 0	April, 1861
2450	Cook's Kitchen (copper), Illogan	17 0 9	34	33 34	1 7 0	0 7 0	May, 1862
286	Copper Hill (copper) Redruth	48 0 0	100		4 10 0	2 0 0	Jan. 1862
12000	Copper Miners of England	25 0	25		7¼ per cent.		Half-yrly.
350000	Ditto ditto (stock)	100 0 0	24		1 per cent.		Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0	31		7 4 0	0 5 0	Mar. 1862
512	Creegbrawse and Penkevil, St. Colomb	—	5		0 10 0	0 10 0	Jan. 1862
867	Cwm Erfin (lead) Cardiganshire	7 10 0	21		7 8 0	0 10 0	April, 1862
128	Cwmystwith (lead), Cardiganshire*	60 0 0	200		239 10 0	4 0 0	Mar. 1862
280	Derwent Mines (sil.-lead), Durham	300 0 0	180		142 0 0	5 0 0	June, 1861
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	445	440 450	790 0 0	8 0 0	Mar. 1862
358	Dolcoath (copper, tin), Camborne*	128 17 6	560		665 10 0	8 0 0	April, 1862
3000	Dyfngwm (lead), Wales	12 6 6	10		0 7 6	0 2 6	Mar. 1862
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	46	42 44	98 0 0	2 0 0	Mar. 1862
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	43⅛	45¾ 46⅛	3 0 0	0 15 0	April, 1862
300	East Darren (lead), Cardiganshire*	32 0 0	45		81 10 0	1 0 0	Mar. 1862
128	East Pool (tin, copper), Pool, Illogan	24 5 0	300		307 10 0	2 10 0	April, 1862
2048	East Wheal Grylls (tin, copper), Germoe†	0 10 0	5	4½ 5	0 4 0	—	—
2800	Foxdale (ld.) [L.] [2560 £25 pd., 240 £20 pd.]†		35		—	—	Dec. 1861
5000	Frank Mills (lead), Devon	3 18 6	4¼	3	0 16 0	0 2 0	Mar. 1862
6000	Great South Tolgus [S.E.], Redruth*	0 14 6	5¼	5⅜ 5⅝	7 18 6	0 5 0	Dec. 1861
1798	Great Wheal Fortune (tin), Breage	18 6 0	27	25¼ 26¼	2 0 0	0 10 0	April, 1862
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	6¾		1 17 6	0 5 0	Mar. 1862
10240	Gunnis Lake (Clitters' Adit)	0 2 0	3⅜		0 3 0	0 1 6	Mar. 1862
1024	Herodsfoot (ld.), near Liskeard [S.E.]	8 10 0	38⅛	37¼ 38½	18 0 0	1 15 0	Feb. 1862
1000	Hibernian Mine Company	92 6 2	27½		7 10 0	0 15 0	Sept. 1861
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	110		383 10 0	2 0 0	Mar. 1862
9000	Marke Valley (copper), Caradon	4 10 6	10⅜	10 10¼	1 17 0	0 5 0	April, 1862
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	170		86 13 0	5 0 0	May, 1862
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	17¼	17 17⅛	14 7 11	0 7 0	Dec. 1861
640	Mount Pleasant (lead), Mold	4 0 0	32⅛		18 10 7	0 10 0	April, 1862
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	2⅛		0 3 6	0 1 0	Sept. 1861
6000	North Downs (copper) Redruth	2 3 4	4¼	4 4½	0 10 0	0 2 6	May, 1862
1366	North Grambler (copper), Redruth	2 7 6	6		0 10 0	0 10 0	Mar. 1861
5000	Orsedd (lead), Flintshire	0 0 8	1¼		0 10 4	0 0 8	Mar. 1862
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	5		36 12 6	0 3 0	Mar. 1862
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		37 10 0	5 0 0	Mar. 1862
1772	Polberro (tin), St. Agnes	—	5		6 19 6	0 10 0	Dec. 1861
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	42	40 41	63 0 0	1 5 0	Feb. 1862
6000	Rosewall Hill and Ransom United	2 16 0	3⅞	3⅛ 3¾	0 3 0	0 3 0	Mar. 1862
16	Rhosesmor (lead)	50 0 0	—		1250 0 0	100 0 0	Quarterly.
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	345	340 345	371 0 0	5 0 0	Mar. 1862
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	51	49 51	106 0 0	1 10 0	Mar. 1862
496	S. Wh. Frances (cop.), Illogan* [S.E.]	18 18 9	105	95 100	359 5 0	1 0 0	May, 1862
280	Spearne Moor (tin, copper), St. Just	31 17 9	50½		9 15 0	1 0 0	June, 1861
910	St. Ives Consols (tin), St. Ives†	8 0 0	26		484 10 0	0 10 0	Nov. 1861
8600	Tamar Con. (sil.-ld.), Beeralston [S.E.]	4 10 0	28s.		5 6 0	0 2 6	Jan. 1861
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	11¼	11¼ 11⅛	11 8 6	0 5 0	April, 1862
200	Trumpet Consols (tin), near Helston	57 10 0	100		55 0 0	2 0 0	Mar. 1862
4200	Vigra and Clogau (copper) [L. £5]	2 15 0	42⅛		2 12 6	1 0 0	April, 1862
1024	Wendron Consols (tin), Wendron	11 13 10	12		8 15 0	1 0 0	Jan. 1861
6000	West Basset (copper), Illogan [S.E.]	1 10 0	12⅛	11¼ 12⅛	22 5 0	0 5 0	Mar. 1862
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0	June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0	37½	34 36	100 11 3	1 0 0	Feb. 1862
6400	West Fowey Consols (tin and copper)	7 10 0	4		1 0 0	0 3 0	May, 1862
1024	West Penstruthal	4 0 0	7		2 19 6	2 19 6	May, 1862
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	270	270 280	346 0 0	8 0 0	April, 1862
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	97⅛	94 96	582 10 0	3 0 0	April, 1862
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0	65		929 0 0	2 0 0	Mar. 1861
2900	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0	32⅛	30 32¼	27 2 6	0 10 0	April, 1862
128	Wheal Friendship (copper), Devon	50 0 0	90		2400 10 0	5 0 0	Feb. 1861
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	1 7 2	13	12 13½	8 10 0	0 10 0	April, 1862
512	Wheal Jane (silver-lead), Kea	3 10 0	25		13 10 0	1 0 0	Mar. 1862
4800	Wheal Ludcott (lead), St. Ive	2 10 8	7⅜	7¼ 7⅛	1 12 0	0 4 0	Oct. 1861
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6	44⅛		71 5 0	1 5 0	Feb. 1862
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]†	8 0 0	11⅛	10⅛ 11⅛	55 7 6	0 10 0	Mar. 1862
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	300		293 3 0	7 10 0	Feb. 1862
396	Wheal Seton (tin, copper), Camborne	58 10 0	130	126 128	136 5 0	1 10 0	April, 1862
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	16¼	15½ 16⅛	44 10 0	0 15 0	Feb. 1862
5000	Wicklow (copper) [L.], Wicklow	5 0 0	47		43 17 6	2 0 0	Oct. 1861

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
700	Aberdovey (silver-lead), Merioneth	1 10 0	30		0 10 0	0 10 0	Mar. 1859
5120	Alfred Consols (cop.), Phillack [S.E.]	3 7 7	¼	3s. 5s.	20 3 0	0 2 6	April, 1859
2048	Carnyorth (tin), St. Just	3 15 0	1¾		0 19 6	0 2 0	Sept. 1860
6000	Charlotte United, Perranuthnoe	2 8 10	⅛		0 13 0	0 1 6	Sept. 1859
256	Condurrow (cop., tin), Camborne	20 0 0	57½		85 0 0	2 0 0	June, 1857
[illegible]	Devon and Cornwall (copper)	5 16 3	3⅛		0 10 0	0 9 6	Feb. 1859
672	Ding Dong (tin), Gulval	39 2 6	12		16 7 6	1 10 0	Mar. 1857
12800	Drake Walls (tin, copper), Calstock	2 1 0	1¼	23s. 25s.	0 13 6	0 2 0	Sept. 1857
2048	East Falmouth (sil.-ld.), Kenwyn, Kea	3 5 0	¼		0 7 6	0 2 6	Jan. 1858
2048	East Wheal Lovell (tin), Wendron	2 13 6	—		0 5 0	0 5 0	July, 1859
1400	Eyam Mining Co. (lead), Derbyshire	7 2 6	22		20 3 4	0 10 0	May, 1861
4940	Fowey Consols (copper), Tywardreath	4 0 0	5		41 9 3	0 2 6	June, 1860
119	Great Work (tin), Germoe	100 0 0	110		221 10 0	7 10 0	Feb. 1857
6000	Hingston Down Con. (cop.), Cals. [S.E.]	5 1 0	2⅛	2⅛ 2⅛	2 16 0	0 2 6	Nov. 1856
5300	Kelly Bray (lead, copper), Callington	4 13 0	⅜	¾	0 6 0	0 2 0	Feb. 1860
20	Laxey Mining Company, Isle of Man	100 0 0	1200		1420 0 0	50 0 0	June, 1857
160	Levant (copper, tin), St. Just	2 10 0	95		1091 0 0	5 0 0	May, 1860
5000	Mendip Hills (lead) [L.], Somerset	3 15 0	1¾		2 1 0	0 2 6	May, 1860
470	Newtownards Mining Co., Co. Down	50 0 0	35		56 0 0	1 0 0	Sept. 1858
512	Rosewarne United (cop., tin), Gwinear	21 17 10	18	17 19	33 10 0	1 0 0	Sept. 1860
12000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 16 0	12s.	10s. 11s.	0 10 0	0 2 6	July, 1857
128	South Crinnis (copper), St. Austell	19 0 0	285		60 0 0	20 0 0	June, 1855
6000	Tolvadden (copper), Marazion	0 6 0	3¾	3⅝ 3⅞	0 13 6	0 3 0	Mar. 1860
572	Trelyon Consols (tin), St. Ives	11 10 0	18		7 0 0	0 10 0	Sept. 1860
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 13 6	6s.	3s. 4s.	0 5 9	0 1 0	July, 1858
256	West Damsel (copper), Gwennap	38 10 0	60		45 0 0	1 0 0	May, 1860
1024	West Providence (tin), St. Erth	16 15 0	3¾		23 1 9	0 10 0	April, 1857
1024	Wheal Grylls (tin), Perranuthnoe	2 4 0	35	38 35	1 12 0	0 7 6	Nov. 1859
4295	Wheal Kitty (tin), St. Agnes	4 16 6	⅝	1⅞ 2	0 18 6	0 2 0	July, 1860
1024	Wheal Margery (tin, copper)	16 13 0	8		0 10 0	0 10 0	May, 1860
100	Wheal Mary (tin), Lelant	36 2 6	440		280 5 0	7 0 0	June, 1860
1022	Wheal Tremayne (tin, cop.), Gwinear	13 2 6	5		10 2 6	0 7 6	Jan. 1854

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
2464	Burra Burra (cop.), South Australia	5 0 0	110xd.	110 xd.	280 0 0	5 0 0	Dec. 1861
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	34		98 12 0	1 0 0	Jan. 1862
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	7		6 8 0	0 5 0	Jan. 1861
15000	East Indian Coal, Calcutta [L.]	10 0 0	10		7½ per cent.		Yearly.
70000	English and Australian [S.E.]	5 0 0	3¼		1 7 6	0 2 6	Feb. 1862
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	24	23 24	18 5 0	1 0 0	June, 1861
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1¾		0 9 0	0 1 0	Mar. 1862
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	7⅛	7 7⅛	8 6 2	0 3 4	July, 1861
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	2		0 19 9	0 1 0	Feb. 1862
103815	Mariquita and New Granada [S.E.]	1 0 0	⅝		0 9 6	0 1 6	July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	1¼	1 1⅛	0 5 6	0 1 6	Jan. 1862
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	60	59½ 60	46 5 0	3 0 0	Dec. 1861
20000	West Canada Mining Company [L.]	1 0 0	1¼		0 2 0	0 2 0	June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	3		4 5 0	0 15 0	Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0	3¼		15 per cent.		May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	4		1 0 0	1 0 0	June, 1855
43174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	7¼	7 7⅛	1 16 6	0 4 0	Feb. 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6	1⅛		Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6	¾	⅛ ⅜	Dec. 1860
25000	Capula (silver), Mexico [L. £2] [S.E.]	0 10 0	⅜		Jan. 1862
6000	Central American (silver) [L.]	5 0 0	12		Feb. 1859
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 17 6	⅜		Jan. 1861
10000	Copiapo Smelting [L.], Chili	10 0 0	8½		Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	1¼	1 1¼	Fully paid.
25000	East del Rey, Brazil [L. £3]	1 0 0	1⅛	1¼ 1⅛	Sept. 1861
30000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 7 6	¾		Mar. 1862
15000	Elbe Colliery Company [L. £1]	0 5 0	¾		Dec. 1861
30000	Ellerslie and Bardowie, Jamaica	0 18 0	1⅛		July, 1859
6000	English and Canadian Mining Company [L.]	5 0 0	—		Fully paid.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	3¼	2¾ 3¼	Fully paid.
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 5 0	⅞	⅝ ¾	Mar. 1862
24000	Hindostan (copper), Bengal [L. £5]	1 0 0	¾		Nov. 1861
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0	¼		June, 1860
10000	Karbitz Colliery Company [L. £1]	0 10 0	—		Dec. 1861
100000	Montes Aureos (gold), Brazil [L. £2]	1 0 0	1		Jan. 1862
80000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 17 6	⅝		Mar. 1862
60000	New Granada (gold), South America [S.E.]	1 0 0	¼		Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	1		Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 15 0	⅝		Nov. 1861
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 15 0	—		April, 1862
60000	Santa Barbara (gold), Brazil [L. £1]	0 10 0	⅞	1⅛ 1¼	Nov. 1861
120000	Scottish Australian Mining Company [L. £1]	0 10 0	2	1¾	Fully paid.
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	—		May, 1860
50000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	⅝		Fully paid.
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 5s. pd., 25,000 £1 pd.		1⅞		
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		Oct. 1859
12000	Wheal Ellen, South Australia [L. £5]	4 0 0	4¼		July, 1861
35425	Wheal Jamaica (copper)	1 0 0	18s.		Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	⅝		Fully paid.
45000	Yudanamutana (copper), South Australia [L.]	3 0 0	3		Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4825	Abbey Consols (ld.) Cardigan.	2 7 0	1		Nov. 1860
1000	Allt-y-Crib (lead) [L. £5]	2 18 6	2		Oct. 1861
10000	Angarrack (copper), Phillack.	1 1 6	1⅛		June, 1859
1000	Ashburton United (cop., tin)	15 0 0	14¾		Mar. 1862
6000	Bagtor [L. £2]	1 0 0	1¼		
1624	Baileswidden (tin), St. Just	14 8 7	12		Mar. 1862
10000	Bampfylde (copper), Devon	1 0 0	11s6d		Aug. 1860
4000	Bedford Consols (copper)	2 2 6	⅜		Mar. 1862
2000	Berehaven (copper), Ireland	1 0 0	1¼		
6000	Bickerton (copper) [L.]	1 0 0	3¼		
7500	Bickleigh Vale Phœnix [L.]	—	2		Fully paid.
200	Billins (lead) [L. £30]	20 0 0	18	16 18	Feb. 1861
10000	Borlase Con. (tin), St. Just [L.]	1 0 0	—		Fully paid.
1248	Boscaswell (tin), Penzance	6 5 0	8		Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	7 5 0	4		Mar 1862
160	Bosorne & Bollowall, St. Just	6 5 0	10		Dec. 1860
5000	Bottle Hill (tin), Plympton	1 0 0	12s.		
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 4 0	1¼		Mar. 1862
5000	Bronfloyd (ld.), Cardigan. [L.]	2 6 0	3⅛		Feb. 1862
112	Bron-Haulog (ld.), Denbighsh.	20 0 0	20		No call.
5120	Brynambor (ld.), Cardi. [L. £5]	2 0 0	3⅛	3 3⅛	No call.
200	Brynford Hall (lead), Flint	22 10 0	6		April, 1862
500	Bryn Gwiog (lead), Flint	6 0 0	30	25 27	April, 1862
2000	Bryntail, Llanidloes, Montgo.	5 7 0	2¼		Aug. 1861
6380	Buller and Basset Unit. (cop.)	3 13 6	1⅜		Mar. 1862
1200	Burra Burra (cop.), Kenwyn.	2 10 0	2⅛		April, 1862
4096	Calstock Consols (copper)	5 10 0	¼		Dec. 1860
915	Calvadnack, Wendron	19 5 0	7⅛		May, 1862
1000	Camborne Consols (copper)	17 0 0	8		Feb. 1862
4600	Camborne Vean & Wh. Francis	8 8 4	2		April, 1862
914	Caradon Cons. (cop.), St. Cleer	24 7 0	12½		Mar. 1862
1000	Cardigan Cons. (ld.) [L. £10]	8 0 0	9		Oct. 1861
916	Cargoll (silver-lead), Newlyn	15 5 7	15		Sept. 1860
2580	Carmarthen United	5 0 0	4		Fully paid.
6000	Carn Camborne (copper)	0 7 0	14s.	12s. 13s.	May, 1861
4370	Carnewas (ld., cop.), Mawgan	1 3 0	¾		June, 1861
3000	Carn Vivian (tin, cop., lead)	2 1 6	2⅛		Nov. 1861
7000	Carrack Dews	2 16 0	1		April, 1861
1056	Carvannall (cop.), Gwennap	21 11 7	3		Dec. 1860
20000	Carysfort (cop., ld.) [L. £2½]	0 10 0	22s.		Mar. 1859
10000	Castleward, Ireland [L. £1]	0 15 0	15s6d		Mar. 1861
2500	Cefn Cilcen (lead), Flintshire	1 9 0	¾		May, 1862
4500	Central Minera (lead) [L. £5]	1 13 0	2⅛		Mar. 1862
4000	Clara Unit., Ponterwyd [L. £3]	2 7 0	1⅜		Jan. 1862
984	Clijah & Wentworth (tin, cp.)	29 5 6	2		May, 1861
6000	Clinton and Edgecombe United	1 0 0	1⅛		Oct. 1860
3135	Coed Mawr Pool (lead) [L.]	4 9 0	4		Mar. 1862
2000	Collacombe (cop.), Lamerton	5 5 0	12		
50000	Connorree (cop., sulph.) [L.]	1 0 0	31s.	30s.	Fully paid.
5000	Cornubia (tin), Roche	1 10 0	1⅛		April, 1862
10000	Craigton (ld.) [L. £1], Kirkcud.	0 10 0	¾		June, 1859
876	Crane (copper), Camborne	12 0 0	9		Feb. 1862
30000	Craven Moor (ld.), Yorkshire.	0 10 0	4s.		No call.
12000	Crelake (cop.), Tavistock	—	1¾		No call.
8000	Crookhaven (cop.) [L. £2½]	1 0 0	6s. 6d.		Mar. 1861
2000	Crowlwm (lead), Llanidloes	1 10 0	⅞		No call.
6000	Crowndale (cop.), Tavistock	0 11 0	3		Nov. 1858
6000	Cuddra (cop., tin), St. Austell	2 19 0	2¾		Feb. 1862
1800	Cwmbrane, Carmar. [L. £3]	2 0 0	2¼	2 2¼	Feb. 1862
21000	Dale, North Staffordshire [L.]	1 0 0	⅜		Fully paid.
2000	Deep Level, Minera [L. £5]	3 5 0	—		Feb. 1862
4817	Devon and Courtenay (cop.)	1 11 0	11s.		Oct. 1861
12000	Dev. New Copper Co. [L. £2]	—	—		
12000	Devon Union (copper) [L. £1]	0 17 6	⅞		Feb. 1862
4566	Devon Wheal Buller (copper)	4 0 0	¾		Feb. 1862
1000	Durlo (tin), Lelant	7 2 0	3½		Mar. 1862
3000	Dulta (tin) [L. £1]	—	1		
244	Eaglebrook (lead), Cardigan	77 10 0	16		Oct. 1861
4096	East Alfred Consols (copper)	4 2 6	1⅜		Mar. 1862
3000	E. Beam (tin), St. Aus. [L. £2]	1 0 0	2¼		April, 1862
6000	E. Budnick and Mount (cop.)	0 10 0	7s.		Jan. 1861
6000	East Carn Brea (cop.) Redruth	3 11 0	14½	16¼ 16¾	Oct. 1861
6400	East Crinnis and South Par	2 14 0	2		May, 1862
6000	East Damsel (cop.), Gwennap	1 11 0	1¾		Mar. 1862
4000	East Devon Gt. Consols (cop.)	1 1 6	2		April, 1862
6000	E. Grenville (cop.), Camborne	1 4 6	36s.	2⅛ 2⅜	May, 1862
4000	E. Gunnis Lake & S. Bedf. (cp.)	6 13 0	¾		April, 1862
6145	East Jane (sil.-ld.), Cardinham	—	3		
12000	East Mona (cop., &c.) [L. £1]	0 5 0	—		May, 1861
8000	E. Polberro, St. Agnes [L.]	0 10 0	⅛		May, 1861
4096	E. Providence (tin), Uny Lel.	2 8 4	2¼		Mar. 1862
6000	E. Releath (tin, cop.), Wendron	0 1 0	1		Aug. 1860
5000	E. Rosewarne (cp., tin), Gwin.	2 14 0	26s.	26s. 28s.	May, 1862
5610	East Seton (cop.), Camborne	0 6 0	9s.	⅜ ½	Feb. 1862
256	East Tolgus (copper), Redruth	66 0 0	30		Mar. 1862
1000	E. Trefusis (cop.), Gwennap	7 14 7	2		Sept. 1861
1024	E. Treskerby (cop.), Redruth	4 5 0	5		Nov. 1861
1190	E. Wheal Agar (cop.), St. Cleer	8 12 0	2¾		April, 1862
6000	E. Wh. Ellen (sil.-ld.), St. Ive	0 3 6	¾		April, 1862
4096	East Wheal Fortune	—	1¾		
4000	E. Wh. Russell, Tavis. [S.E.]	7 10 0	3⅛	2⅞ 3⅛	Feb. 1862
6000	Fowey and Par Uni., St. Blazey	0 10 0	1⅛		Nov. 1860
5000	Fursdon (cp.), Okeham. [L. 30s.]	1 7 6	2⅛		Oct. 1861
6000	Furze Hill Wood Cons., Buckl.	0 10 0	—		Mar. 1862
114	Garden (tin), Morvah	35 0 0	20		Feb. 1862
1000	Garreg (lead), Flint	4 15 0	⅛		Mar. 1862
4000	Gawton (copper), Tavistock	1 14 0	⅜		Feb. 1862
1024	Gelliffowler (ld.), Holywell	0 2 6	5s. 6d.		June, 1861
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	5¼	4½	
30000	Glasgow Caradon Cons. [L.]	1 0 0	4		Fully paid.
4892	Goginan (silv.-ld.) [1900 £12½, 2992 £1]		2		July, 1860
6144	Gonamena (copper), St. Cleer.	3 0 0	1⅛	⅞ 1	April, 1862
2000	Goonzion (copper), St. Neot	0 2 6	4s.		Feb. 1861
3000	Gourock (cop.), Scotld. [L. £2]	1 0 0	1		
486	Gramb. & St. Aub. (cp.) [S.E.]	50 0 0	16	14 16	May, 1862
5000	Great Brigan (copper)	3 17 0	3		April, 1862
4096	Great Caradon (cop.), St. Ive.	1 14 0	21s.		Feb. 1862
6000	Great North Downs (copper)	1 0 0	1¼		Dec. 1861
10104	Great Onslow Cons., Camelfd.	3 10 9	¾		Dec. 1860
6000	Gt. Retallack (sil.-ld., blende)	1 11 0	13s.	12s.	Feb. 1862
47000	Gt. TreguneCon. [40,000 £¼, 7000 £¾ pd.]		—		
10000	Great Treveddoe (copper)	0 14 0	1¼		Aug. 1861
6000	Gt. Tywarnhaile (cp.), [L. £5]	3 10 0	3	3⅛	June, 1861
8730	Great Wheal Baddern (tin)	5 17 0	¾		Feb. 1862
6000	Gt. Wh. Busy (cop., tin), Ken.	13 10 0	6½		April, 1862
12500	Great Wh. Martha (cop.) [L.]	1 0 0	—		Fully paid.
5000	Grosvenor (ld.) [2500 £1 pd., 2500 6s. pd.]		—		
4910	Gurlyn (cop., tin), St. Erth	1 18 11	⅞		Feb. 1862
8634	Gwydyr Park Con., Llanrwst	0 18 6	9s.		Dec. 1861
10000	Hafod (ld.), Cardigan [L. £5]	1 0 0	—		Jan. 1862
6400	Harwood (ld.), Durham [L. £1]	0 3 6	⅜		July, 1861
7219	Hawkmoor (tin, cop.) Calstock	2 19 6	⅝		Oct. 1861
200	Herward Unl. (ld.), Flint	42 10 0	10		April, 1862
10000	Holmbush [5000 £5 2s. pd., 5000 5s. pd.]		—		Sept. 1860
40	Imperial Silver-Lead, Dolgelly	65 0 0	80		Jan. 1862
6000	Keswick (lead), Portinscale	5 6	1		Mar. 1862
6000	Lady Bertha (cop.) [S.E.]	1 16 0	13s.	12s. 13s.	April, 1862
3000	Lady Eliza (ld.), Carm. [L. £3]	2 8 0	¾		June, 1861
1019	Leeds & St. Aubyn (tin, cop.)	16 4 4	4		Feb. 1862
963	Lelant Cons. (tin), Uny Lelant	32 10 0	2⅛		Mar. 1861
1000	Llanfair (silver-lead) [L.]	6 0 0	6		Fully paid.
2000	Llywernog (ld.), Card. [L. £3]	1 4 0	1⅜		Jan. 1862
500	Long Rake (lead), Flint	13 0 0	14	14 16	April, 1862
2000	Lower Park Denbighshire [L.]	4 2 0	18s.		April, 1862
6000	Maudlin [2848 £6, 3416 £1]	—	—		
4480	Merllyn (lead), Flint	3 14 6	10s.	⅞ 1⅛	Mar. 1862
22000	Merryfield (lead) [L.]	0 12 0	9s.		May, 1860
3475	Michell (lead), Flint	0 2 6	9s.		Nov. 1861
16000	Mold (lead), Flints. [L. £1]	0 17 0	⅞		Jan. 1860
5000	Molland (cop.), S. Moulton	2 8 0	2s.		July, 1861
1024	Nangiles (tin, copper), Kea	6 10 0	6		Mar. 1862
5000	Nanteos and Penrhiw [L. £4]	3 12 0	—		Jan. 1862
2400	Nant-y-Iago (ld.), Merioneth	3 7 6	2⅛		April, 1862
250	Nanty Mines (ld.), Montgom.	20 0 0	—		Fully paid.
6400	Nether Heath (lead), Dufton	0 15 6	⅛		April, 1860
6400	N. Crow Hill (ld.), St. Stephen	2 3 6	1⅛		April, 1862
4540	New E. Wh. Russell, Tavistock	0 4 0	⅛		Aug. 1861
1000	New Godolphin	0 10 0	—		Jan. 1862
6000	New S. Caradon (cop.), St. Cleer	0 7 6	⅝	⅝ ¾	
6000	New Treleigh Cons., Redruth	1 14 0	1⅛		Feb. 1862
2000	New Wheal Clifford (copper)	0 6 0	¼		Mar. 1861
1024	New Wheal Hender, Crowan	2 10 0	3		June, 1861
400	New Wh. Seton (cop.), Camb.	16 10 0	85		April, 1862
2300	New Wh. Vor & E. Wh. Metal	9 0 0	—		July, 1861
2500	N. Wh. Vaddon (tin), Marazion	1 2 6	1¼		Nov. 1861
6000	Nidderdale (ld.), Yorks. [L. £1]	0 15 0	⅞		Jan. 1861
90	N. Budnick (tin, ld.), Perranz.	1 10 0	40		No call.
4500	No. Budnick and West Mount	0 5 0	⅜		
1024	North Buller (cop.), Redruth	21 17 6	3⅛		Feb. 1862
6000	Nor. Clifford (cop.), Gwennap	0 5 0	⅜		Nov. 1860
4000	North Cornwall (Endellion)	—	2		No call.
20000	North Devon (sil.-ld.) [L. £1]	0 9 0	12s.		Feb. 1862
5000	N. Dolcoath (cop.), Camborne	2 7 6	¾	⅛ ⅝	Feb. 1862
1000	North Fortescue (copper)	1 14 0	2		Oct. 1861
2500	North Frances, (cop.) [S.E.]	13 6 0	2¾		Feb. 1862
6000	North Great Work, Breage	2 0 0	1⅛		April, 1862
6000	N. Hafod (sil.-ld.), Car. [L. £2]	1 0 0	—		May, 1862
8000	N. Hallenbeagle (tin, cp.) [L.]	0 15 0	¾		Dec. 1861
2000	North Jane (tin, silver-lead)	4 0 0	2⅛		Dec. 1861
6000	North Kit Hill (tin, copper)	0 2 6	⅜		
6000	North Laxey (lead) Isle of Man	—	1⅛		
2000	N. Levant (tin, cop.), St. Just	6 16 6	6		
10000	North Minera (lead) [L.]	1 0 0	1	17s. 18s.	
4000	North Phœnix (copper)	—	5⅛	5⅛ 6	
6000	North Porthilly (silv.-lead)	—	⅛		
4096	North Rosewarne, Gwinear	0 4 6	4s. 6d.		
700	N. Roskear (cop.), Camborne	18 0 0	22½	21 22	
5000	N. Treliether (sil., cp.), Padstow	1 0 0	1⅛		
848	N. Treskerby (cop.), St. Agnes	10 3 9	25	27 28	
6000	N. Wh. Basset (cop., tin) [S.E.]	2 6 0	3⅛	4¼ 4¾	
1024	North Wheal Busy (cop., &c.)	8 17 7	4⅛		
5610	North Wheal Crofty [S.E.]	1 19 0	2⅝	2⅛ 2⅝	
6144	N. Wh. Robert, Samp. Spiney	2 12 11	18s.	¾ 1	
4108	North Wheal Trelawny (lead)	3 5 6	¾	1 1⅛	
5900	North Wheal Vor (tin), Breage	3 0 0	—		
4000	N. Wrey (ld.), St. Ive [L. £2]	0 17 6	20s.		
4096	Okel Tor (lead), Calstock	5 6 6	2⅛		
600	Old Tolgus United (cop.) Redr.	47 18 0	5	4 6	
800	Pant-y-Buarth (ld.) [L. £10]	6 0 0	20		
8465	Pedn-an-drea United (tin)	3 9 6	¾		
12000	Pencraig United (ld.) [L. £1]	0 7 6	—		
5000	Pendeen Consols, St. Just	3 17 0	4⅛		
1000	Pengenna (ld., sil.), St. Kew	4 10 0	6⅛		
5000	Penhalls (tin), St. Ann's	1 6 0	5⅛		
200	Pentre Lygan (lead) [L. £30]	20 0 0	21		
6000	Polhigey Moor (tin), Wendron	1 2 6	1¼		
944	Praed Consols (tin), Lelant	4 13 3	2⅛		
6400	Prideaux Wood (tin, cop.)	3 12 0	16s.		
512	Polbreen (tin), St. Agnes	8 0 0	8		
6000	Prosper Uni. (tin, cp.), St. Hilary	4 3 0	3⅛		
11789	Redmoor (cop., tin), Callington	0 10 0	6s.		
6000	Releath (tin, cop.), Crowan	1 0 0	2¼		
2500	Rhoswydol and Bacheiddon	12 5 0	7⅛		
3000	Rhyscog (silver-lead) [L. £5]	1 0 0	1		
20000	Ribden [L.] [15000 £1, 5000 £½ pd.]		—		
10000	River Tamar Copper [L.]	1 0 0	1		
4096	Rosewarne Consols (copper)	3 7 6	2⅛		
5000	Round Hill (cop., ld.), Salop	2 5 6	⅛		
2000	Scorrier Con. (tin, cp.), St. Agnes	3 0 0	1⅛		
10000	Sigford Con. (cop., tin) [L. £1]	0 15 0	1⅛		
100	Silver Rake (lead) [L. £20]	6 0 0	9		
15000	Silv. Vein, St. Winnow [L. £1]	0 10 0	2¼		
6000	Smith's Wood (tin, cp.) [L. £2]	1 10 0	3⅛		
512	South Basset (cop.), Gwennap	13 5 8	12	11½ 12⅛	
100	South Bryn Gwiog (lead)	5 0 0	24		
6400	So. Buller & W. Penstruthal	0 12 0	1¼		
4096	S. Caradon Wh. Hooper (cop.)	3 0 0	21s.	19s. 21s.	
6000	So. Carn Brea (cop.) [S.E.]	5 15 6	3⅜		
6138	S. Condurrow (tin, cp.), Camb.	2 6 0	10s.		
2283	Sou. Crenver (cop.), Crowan	10 7 0	5⅛		
6000	South Darren (ld.) [L. £3⅛]	2 10 0	1⅛		
1024	S. Ding Dong, Gulval (tin)	0 10 0	¾		
6000	S. Dolcoath & Carnarthen Con.	2 6 0	4		
6000	South Gernick (tin), Crowan	0 2 6	⅜		
950	South Gorland	6 10 0	6		
20	South Levant (tin), St. Just	59 0 0	50		
4000	South Minera [L. £5¼]	2 2 0	4		
5537	So. Phœnix (cop.) Linkin.	4 10 0	2⅛	2 2⅛	
1024	South Tresavean, Gwennap	3 18 9	1⅛		
4096	S. Wh. Betsy, Mary Tavy, Dv.	1 7 0	1		
1105	So. Wh. Crofty (cop.), Illogan	4 8 10	4		
1024	S. Wh. Ellen (cp.), St. Agnes	9 18 2	1		
1000	South Wh. Kitty (tin), Lelant	1 10 0	1¾		
1024	S. Wh. Lovell (tin), Wendron	1 4 6	2¼		
6000	S. Wh. Margaret (tin), Ludgvan	0 3 0	7s.		
400	So. Wh. Seton (cop.), Camborne	29 13 0	6		
794	Spearne Cons. (tin), St. Just	6 12 0	3¼		
970	St. Aubyn and Grylls (cp., tin)	7 14 6	2⅛		
5208	St. Austell Consols (tin, &c.)	3 16 0	1¾		
4000	St. Day United (tin), Redruth	2 3 9	—	3⅛ 3¼	
1024	St. Ives Wheal Allen (tin)	7 13 9	6		
6000	St. Just (tin & cop.) [L. 2⅛]	0 15 0	1⅛		
640	Stamp Office (lead), Mold	1 0 0	1½		
1000	Stencoose and Mawla (tin, cp.)	3 0 0	2		
920	Stray Park (cop., tin) [S.E.]	28 9 0	32½	32 33	
5000	Tavy Con. (cop.), near Tavis.	5 12 6	1⅛		
3000	Tees Side (ld.), Cumb. [L. £1]	0 13 0	4s.		
6000	Tolcarne (cop.), Camborne	1 2 6	3	3 3¼	
2000	Treffry Consols	0 5 0	—		
2000	Trefulack Uni. (tin), St. Enoder	3 5 0	4¼		
5000	Treloweth (copper), St. Erth	6 6 8	21s.		
1024	Trencrom (tin), Uny Lelant	10 15 0	3¾		
5000	Tresellyn and Scaddick Cons.	1 5 6	—		
8000	Tretoil (copper, tin)	2 7 6	1⅛		
5600	Trevenen and Tremenheere	6 3 6	2⅛		
4096	Treweatha (sil.-ld.), Menhen.	4 16 6	½		
2048	Treworlis (tin), Wendron	3 6 4	2		
4000	Trumpet Unit. (tin), Wendron	1 2 6	8s.		
3000	Tyne Head (ld., cop.) [L. £1]	0 12 0	¾		
800	Tynewydd (sil.-ld.), Cardigan	0 5 0	—		
1024	Tyringham Consols (tin)	2 0 0	2¾		
5120	United Mines (cp., &c.), Tav.	4 16 6	1⅛		
1000	Waenlas (ld.), Denbigh. [L. £10]	8 0 0	5		
4000	Wentnor [L. £2½]	1 19 0	1⅞		
3000	West Alfred (copper) [L. £3]	1 0 0	1		
20000	West Beam [L. £1]	0 7 6	⅛		
100	W. Bryn Gwiog (ld.) [L. £20]	9 0 0	12		
1218	W. Condurrow (tin, cop.), Cam.	7 0 0	6⅛	6⅛ 7¼	
16	West Denbigh (ld.), Denbigh.	35 0 0	100		
30000	W. Devon Con. (cop.), [L. £1]	0 12 6	⅛		
4620	W. Great Work (tin), Germoe	0 10 0	11s.		
25000	West Par Con. (cp.) St. Blazey	1 10 0	¾		
6000	W. Polmear (tin, cp.), St. Austell	0 13 0	⅛		
1600	W. Rose Down (cop.), Caradon	4 10 0	16	15 16	
256	West Sharp Tor (cp.) Killaton.	137 0 0	80		
6000	W. Silver Bank (sil.-ld.) [L. £3]	1 5 0	—		
4096	West South Caradon (copper)	1 16 6	1	⅞ 1⅛	
1056	West Stray Park (cop.), Camb.	8 9 0	1⅛		
5000	West Tolcarne (cop.), Crowan	1 15 0	⅞		
512	West Tolgus (cop.), Redruth	23 10 0	36	32½ 35	
5120	West Tolvadden	1 6 6	1		
1827	West Trevelyan (tin, copper)	10 2 0	2		
4000	West Wendron (tin), Wendron	1 0 6	3s.		
512	West Wheal Frances, Illogan	75 5 0	10	11 14	
10000	West Wheal Jane (tin, &c.)	2 18 6	¾		
1024	West Wheal Lovell, Wendron	2 13 8	1		
6000	Wheal Agar (copper), Illogan	3 9 0	2⅛		
2048	Wh. Agnes (sil.-ld.), St. Kew	—	2		
1024	Wh. Anna (ld., blende), Perranz.	0 13 6	1¼		
5000	Wheal Annie (cop.), Gwinear	0 15 0	¾		
5990	Wh. Arthur (cop.), Calstock	3 14 0	⅞		
1000	Wheal Basset and Grylls (tin)	7 0 0	12		
6000	Wheal Caradon (copper)	0 15 0	—		
18000	Wh. Concord (sil.-ld., cp.) [L. £1]	0 5 0	—		
6000	Wheal Crebor (cop.), Tavistock	0 19 0	⅛		
5120	Wheal Cupid (cop.), Redruth	3 19 0	9s.		
512	Wh. Damsel (cp., tin), Gwennap	26 13 6	16		
4096	Wh. Edward (cop.), Calstock	7 10 0	1⅜	1⅞	
4000	Wh. Emma (cp) Buckfastleigh	2 15 0	4		
2000	Wheal Falmouth & Sperries	2 15 0	8		
5844	Wh. Grenville (copper) [S.E.]	7 12 0	3½	6¼ 6⅜	
5120	Wheal Harriett, Camborne	4 4 6	24s.	1⅞	
6000	Wh. Harris (ld., cop.), Lifton	0 10 6	1		
1024	Wheal Hearle (tin), St. Just	9 13 8	20		
2048	Wheal Hope (sil.-ld.), Perran	0 18 0	⅝		
6000	Wh. Moyle (cop.), Gwennap	2 7 0	1⅛		
6000	Wh. Norris (tin, cp.), St. Cleer	1 18 1	1⅜		
1024	Wheal Polmear, St. Austell	3 13 9	19		
2315	Wh. Pollard (cop.), St. Neot's	2 10 0	⅛		
1000	Wh. Prosper (cp., tin), Breage	9 0 0	8		
1879	Wheal Prospidnick (tin)	1 19 0	5⅛		
240	Wh. Reeth (tin), Uny Lelant	88 10 0	30		
1024	Wh. Sicily (sil.-ld.), Broadoak	3 17 6	4		
4096	Wheal Sidney (tin), Plympton	3 16 1	2		
2048	Wh. Sithney & Carnmeal Uni.	7 0 0	1⅜		
1024	Wheal St. Andrew (copper)	5 0 0	5		
512	Wh. Trannack (tin), Sithney	2 10 0	—		
512	Wh. Trefusis (cop.) Gwennap.	26 5 0	3		
6000	Wheal Union (cop.), Redruth	3 9 0	3	3 3¼	
6000	Wh. Unity (cop., tin), Gwinear	11 15 0	12s.	12s. 14s.	
4096	Wh. Uny (tin, cop.), Redruth	8 13 6	7⅛	7⅜ 7⅜	
1024	Wh. Vyvyan (cop.), Constantine	3 0 0	—		
6000	Wheal Welcome (tin, copper)	1 0 0	4⅛		
6400	Whitford (lead), Holywell	10 16 6	—		
5000	Willow Bank (lead) [L. £2]	1 14 0	4s.		
1024	Worvas Downs (tin), Lelant	4 15 0	5		
3097	Yarner (copper), Devon	2 10 6	2	1⅛	

SLATE QUARRIES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
8800	British Slate [7000 £1, 1800 £10] [L.]		1⅛		
10000	Criccieth, Carnarvon [L. £3]	1 10 0	1⅛		
20000	Festiniog Slate Quarry [L. £5]	4 10 0	—		
6000	Glan-y-Pwll, Merion. [L. £5]	2 0 0	2¾		
10000	Great Moelwyn Slate [L. £5]	2 0 0	1⅛		
600	Llangollen Slate and Slab	—	—		
10000	Lower Taldrws [L. £2½]	1 10 0	1⅛		
6000	Slate Mountain Merio. [L. £5]	2 0 0	—		

*** Those mines with [S. E.] appended have been admitted on the Stock Exchange. Those mines with [L.] appended have been [illegible] Limited Liability.

*** Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alteration which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we ... information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

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